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Construction contractors industry developments - 2004/05; Audit risk alerts

American Institute of Certified Public Accountants. Auditing Standards Division

AUDIT RISK ALERTS

Construction Contractors Industry Developments — 2004/05

Strengthening Audit Integrity
Safeguarding Financial Reporting

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This Audit Risk Alert is intended to provide auditors of construction contractors with an overview of recent economic, industry, technical, and professional developments that may affect the audits they perform.

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Construction Contractors Industry Developments—2004/05

How This Alert Can Help You

This Audit Risk Alert can help you plan and perform your construction industry audits. The knowledge that this Alert delivers can assist you in achieving a more robust understanding of the business environment in which your clients operate—an understanding that is more clearly linked to the assessment of the risk of material misstatement of the financial statements. Also, this Alert delivers information about emerging practice issues and current accounting, auditing, and regulatory developments.

If you understand what is happening in the construction industry, and if you can interpret and add value to that information, you will be able to offer valuable service and advice to your clients. This Alert can assist you in making considerable strides in gaining that industry knowledge.

This Alert describes trends and issues facing most contractors in many of the construction markets in the country. National trends and industry-wide benchmarks can help you identify unusual financial statement relationships at the planning or final review stages of an audit. Once they are identified, you can direct your audit attention to those areas. However, broad national trends have their limitations. Keep in mind that your clients will be affected much more by local economic, political, and industry conditions that exist in the specific markets your clients serve.

This Alert is intended to be used in conjunction with the AICPA general *Audit Risk Alert—2004/05* (product number 022335kk).

Construction Industry Overview

The construction industry consists of individuals and companies engaged in diverse activities that are defined as *construction* in the

Standard Industrial Classification Manual. In the United States, the construction industry represents billions of dollars of economic activity, consists of several hundred thousand business entities that are widely dispersed throughout the country, employs approximately 6 percent of the U.S. labor force, and contributes a relatively constant annual percentage (approximately 5 percent) to the gross domestic product (GDP).

Are All Contractors Alike?

No, not all contractors are alike. Not only do contractors offer different kinds of services, they also have different capabilities. Consequently, the economic and audit risks associated with contractors vary. For example, the business risks and issues facing residential home builders may be very different from the risks encountered by contractors and subcontractors who work on commercial office buildings. You have to consider the contractor within the context of the market segment that he or she serves to better understand the industry and what we need to know about it as auditors. This Alert describes economic, industry, and audit conditions for the following kinds of contractors:

- *Residential building.* These contractors are engaged in the construction of new single-family and multifamily residential buildings. A number of contractors are involved strictly in the remodeling and maintenance of residential buildings.
- *Nonresidential building.* These contractors specialize in the construction of commercial buildings, such as offices, industrial, retail, and lodging facilities.
- *Heavy construction.* These contractors are engaged in projects such as highways, bridges, dams, railroads, and airports.
- *Specialty trade.* These contractors specialize in work such as painting, electrical, roofing, plumbing, and other specialty trades. Contractors in the specialty trades frequently work as subcontractors on a wide variety of projects.

The organizational structure, resources, and capabilities of contractors vary with the type of activity, and each kind of contractor can pose different accounting and auditing problems. However, certain characteristics are common to all entities in the construction industry. The most basic common characteristic for construction entities is that work is performed under contractual arrangements with a customer. A contractor, regardless of the type of construction activity or the type of contractor, typically enters into an agreement with a customer to build or make improvements on a tangible property to the customer's specifications. Other characteristics common to all contractors and significant to auditors include the following:

- A contractor normally obtains the contracts that generate revenue or sales by bidding or negotiating for specific projects.
- A contractor bids for or negotiates the initial contract price based on an estimate of the cost to complete the project and the desired profit margin, although the initial price may be changed or renegotiated.
- A contractor may be exposed to significant risks in the performance of a contract, particularly when the contract is a fixed-price contract.
- Customers frequently require a contractor to post a bid, performance, and payment bond as protection against the contractor's failure to meet performance requirements and payment obligations.
- The costs and revenues of a contractor are typically accumulated and accounted for by individual contracts or contract commitments extending beyond one accounting period, which complicates the related management, accounting, and auditing processes.

Major Construction Industry Risks

In addition to having many common characteristics, construction contractors share many of the same risks. These include:

- Dynamic and diverse laws in different states and countries.
- Contract and tort liabilities, including long-term warranty, mold claims, guarantees, and tort obligations.

- Dependence on other parties' performance.
- Dependence on key customers.
- Financing and the availability of capital.
- Changes in the economy.
- New technology.
- Licensing and regulatory approvals.
- Foreign and domestic inflation and currency exchange rates.
- Foreign government stability.
- Quality control issues.
- Product recall consequences.
- Environmental issues.
- Intellectual property rights.
- Risk of loss to persons and property.
- Loss of revenue.
- Failure to complete projects on time.
- Labor skill and availability.
- Key employee retention.
- Cost of employee benefits.
- Ownership and management succession issues.
- Safety of employees on and off the job.
- Weather.
- Scheduling.
- Engineering and design quality and timeliness.
- Subcontractor problems.
- Supplier concerns.

Funding Sources for Construction

To better understand the dynamics of the construction industry, it also helps to consider sources of funding. *Publicly* funded construction is financed by federal, state, and local governments and is driven by the political and legislative processes. For example, the passage of bond measures to fund school construction has resulted in increased construction activity in many areas during the past year. *Privately* funded construction is financed by private owners, such as real estate development companies, home builders, and various business entities. The need for privately funded construction is influenced by a wide variety of economic forces, including the availability of capital, the status of the local and world economy, the level of interest rates, and demographics.

Industry and Economic Developments

General Industry Trends and Conditions

Read the AICPA general *Audit Risk Alert—2004/05* for an overview of the current U.S. and global economic environment.

New construction starts in July 2004 climbed 5 percent to a seasonally adjusted annual rate of $595.1 billion. July showed stronger activity for each of the construction industry's main sectors—nonresidential building, residential building, and nonbuilding construction (public works and electric utilities). In addition, the U.S. Census Bureau reported that construction put in place in July had a record total value of $997.2 billion.

What was noteworthy about the Census report was that private nonresidential and public construction, as well as housing, were up. In fact, for the first seven months of 2004, private nonresidential construction was 2.5 percent higher than in the same period in 2003 and public construction was up 4.5 percent. Although growth was not uniform across the country, the gains were widespread: Among private nonresidential components, there were year-to-date increases for health care construction (9 percent), office (7 percent), lodging (6 percent), and commercial (3 percent), but declines for educational (negative 5 percent), power (negative 4 percent), manufacturing (negative 3 percent), and communication (negative 2 percent). Among public components, there were year-to-date gains for highways and streets (8 percent), sewage and waste disposal (8 percent), office (7 percent), and educational (3 percent).

The picture isn't quite as rosy as these figures suggest, however, because they are not adjusted for inflation. Thus, a portion of the gain actually represents higher costs for materials, energy and transportation, and labor.

A second round of good news from Census came in the data on manufacturers' orders. Orders for construction materials and supplies were up 14 percent through July, compared to January through July 2003, while orders for construction equipment were a whopping 42 percent higher. Again, cost increases account for some, but probably not all, of the rise.

In addition, the Bureau of Labor Statistics (BLS) weighed in with the monthly employment report, which showed that construction employment rose by 15,000, seasonally adjusted, in August, to a record 6,930,000. All three BLS categories—building, heavy and civil engineering, and specialty trade contractors, increased over year-ago levels.

Together, these reports portray a construction industry on the upswing—even some segments that have been lagging for years. The economy will have to keep creating jobs and state tax revenues for the upturn to persist, but for now, the future looks brighter than it has for some time.

Construction Put in Place

One of the most widely used measures of construction activity is *construction put in place*, which is tracked monthly by the Bureau of Statistics at the U.S. Department of Commerce. The *value of construction put in place* (value-in-place) is a measure of the value of construction installed or erected at the site during a given period. For an individual project, this includes:

- New buildings and structures.
- Additions, alterations, major replacements, and so on, to existing buildings and structures.
- Installed mechanical and electrical equipment.
- Installed industrial equipment, such as boilers and blast furnaces.
- Site preparation and outside construction, such as streets, sidewalks, parking lots, utility connections, and so on.
- Cost of labor and materials (including owner supplied).
- Cost of construction equipment rental.
- Profit and overhead costs.
- Cost of architectural and engineering (A&E) work.
- Any miscellaneous costs of the project that are on the owner's books.

The total value-in-place for a given period is the sum of the value of work done on all projects under way during this period, regardless of when work on each individual project was started or when payment was made to the contractors. For some categories, estimates are derived by distributing the total construction cost of the project by means of historic construction progress patterns.

Exhibit 1, "New Construction Put in Place," presents details of construction put in place for various market segments. (Note that the amounts are in billions of dollars and represent seasonally adjusted annual rates.) To add some perspective, in January 1992, at the start of the current construction boom, the total new construction put in place was $452 billion, as compared with the estimated 2004 amount of $992.9 billion—a gain of more than 120 percent during the period.

EXHIBIT 1 New Construction Put in Place
(Billions of Dollars—Seasonally Adjusted Annual Rate, in Current Dollars)

	July 2003	*July 2004*
Private construction	681.1	758.3
Public construction	228.4	238.9
Total construction	**909.5**	**997.2**
Residential building	472.5	537.5
Nonresidential building		
Office	30.1	31.4
Power	21.7	24.0
Commercial	59.0	61.6
Lodging	9.4	11.6
Other nonresidential	88.4	92.2
Total nonresidential	208.6	220.8
Total private construction	**681.1**	**758.3**
Highways and streets	61.3	65.7
Infrastructure	27.1	28.9
Educational	62.9	63.8
Other public buildings	22.8	24.3
Other public construction	54.3	56.2
Total public construction	**228.4**	**238.9**

Construction put in place during July 2004 was estimated at a seasonally adjusted annual rate of $997.2 billion, 0.4 percent above the revised June estimate of $992.9 billion, according to the U.S. Commerce Department's Census Bureau. The July 2004 figure is 9.7 percent above the July 2003 revised total of $909.5 billion. During the first seven months of this year, construction spending amounted to $550.2 billion, 9.0 percent above the $504.8 billion for the same period in 2003.

Spending on private construction was at a seasonally adjusted annual rate of $758.3 billion in July 2004. Residential building construction was at a seasonally adjusted rate of $537.5 billion, 0.3 percent above the revised June estimate of $536.1 billion.

In July 2004, the estimated seasonally adjusted annual rate of public construction put in place was $238.9 billion, 0.6 percent above the revised June estimate of $237.6 billion.

Help Desk—You can access current statistics of construction put in place and other construction industry information at www.census.gov.

Private Construction

Residential Building

The residential building segment of the construction industry includes new single- and multifamily housing as well as residential repairs and improvements. Conditions with the most impact on the demand for residential construction include the following:

- *Housing affordability.* Housing affordability is the extent to which potential buyers have the means to purchase a home. Affordability can be measured in several ways by considering average home prices and income levels. For example, some analysts create an "affordability index" by comparing median home prices to household income levels. As income levels get closer to housing prices, the average home becomes affordable to more local residents.

- *Interest rates.* Most homes are financed, and interest rates therefore have a tremendous effect on the affordability of housing. As interest rates rise, the cost of home financing increases; as they fall, the cost of financing decreases. However, interest rate changes do not have an immediate impact on home-buying markets—usually rates have to be in effect for several quarters to reverse home-buying trends.

- *Demographics.* Shifts in demographics can have a significant impact on housing demand. For example, the aging of the U.S. population has increased demand for low-maintenance and multifamily housing. A large number of baby boomers are now entering their peak earning years, which is expected to affect the affordability and demand for single-family homes.

- *Market velocity.* According to industry sources, more than half of all home improvements occur within 18 months after a new owner moves in, or within 12 months before the home is sold. Thus, during times when new and used home markets are active, residential remodeling and improvement activity also increases.

As one of the main drivers of construction's recent 10-year expansion, home building continues to lead the industry's growth. With the Federal Reserve Board setting its benchmark for interest rates at its lowest level in 40 years, and with strong demographics, home building has kept growing.

Housing construction in August 2004 surged to its highest level in five months, a dose of encouraging news for the economy's expansion. The number of housing projects launched by builders clocked in at a seasonally adjusted annual rate of 2 million units, a 0.6 percent increase from July's level, according to the U.S. Commerce Department.

The 2-million-unit pace of housing construction registered in August was the highest since March and was better than analysts were expecting. They were forecasting housing construction to decline, in part because of hurricanes and bad weather in parts of the country.

July's housing figures also turned out to be stronger than the government first estimated; housing construction shot up by 9.4 percent to an annual rate of nearly 1.99 million units.

The latest report on housing reinforced Federal Reserve Chairman Alan Greenspan's view that the economy has regained some traction after hitting a soft patch in the late spring. Federal Reserve policy makers echoed those thoughts in explaining their decision to boost short-term interest rates for the third time this year. Some economists are predicting that home sales will reach record highs for all of 2004, helped out by relatively low mortgage rates.

Nonresidential Building

Nonresidential building in July advanced 9 percent to $171.8 billion. A major part of the nonresidential gain was related to the groundbreaking for the Freedom Tower in lower Manhattan, with the portion entered as a July construction start estimated at $800 million. If this large project is excluded from the July construction statistics, nonresidential building was still up 3 percent for the month. With the boost coming from the Freedom Tower, new office construction starts in July surged 40 percent; excluding the Freedom Tower, office construction in July retreated 12 percent from June. The other commercial structure types posted these July gains: hotels, up 7 percent; stores and shopping centers, up 12 percent; and warehouses, up 21 percent. Stores and hotels over the past year have been the leading edge for the emerging upturn by commercial building, and now growth is becoming discernible for offices and warehouses. The July nonresidential statistics also included a strong increase for manufacturing-related buildings, up 148 percent, with a large boost provided by the start of a $363 million refinery in Minnesota.

The institutional side of the nonresidential market in July showed a mixed pattern by structure type. Increases were reported for public buildings (courthouses and detention facilities), up 10 percent with the help of a $144 million courthouse project in Worcester, Mass.; and the amusement and recreational category, up 14 percent. Declines were reported for school construction, down 3 percent; churches, also down 3 percent; healthcare facilities, down 22 percent; and transportation terminals, down 27 percent. During the first seven months of 2004, school construction was down 5 percent from 2003, as the mild retrenchment from the 2001 all-time high for this structure type continues.

Office Market

The amount of new office space put on the drawing board soared 81 percent in the first four months of 2004 from a year earlier, to nearly 129 million square feet, according to joint research by Boston-based Property & Portfolio Research Inc. (PPR) and McGraw-Hill Construction Dodge. And the amount of office space entering the final planning and bidding phase jumped 70 percent to 37 million square feet.

Construction started on 46 million square feet of office space in the first four months of 2004, up slightly from a year earlier. The last peak in office construction was in 2000, when 149 million square feet of office space was built in the 54 U.S. markets PPR tracks.

Not all the space that enters the planning or the final planning and bidding stages gets built. Still, the amount of office space in the pipeline, especially in the final-planning stage, is worrisome, given that demand is unlikely to increase that much.

In addition, real estate research firm Reis Inc. reported recently that office-building values in 50 markets dropped 1.8 percent, on average, from the fourth quarter of 2003 to the first quarter of 2004, the fifth straight quarterly decline, according to the *Wall Street Journal.* Furthermore, net absorption of vacant space has slowed. And an analysis of state-by-state employment data by the Economic Policy Institute shows that employment in most states remains below the level of March 2001, when the last recession "officially" began. These statistics suggest that office construction will remain sluggish for a few more quarters at least.

According to Jim Haughey, economist for Reed Business Information, the office market will remain depressed for another year, with owners struggling to hold rental rates and developers beating the bushes to find the key tenants they need to get a construction loan. Although the market will remain depressed, Haughey predicts that office construction spending will rise 7 percent in 2004, with the annual growth rate over 10 percent later in the year. A 15 percent expansion is expected next year and even faster growth is forecast for 2006, according to Haughey.

Industrial Market

Industrial real estate markets improved markedly in the second quarter of 2004, with 38.4 million square feet of absorption, compared with only 9.8 million square feet during the first quarter, according to a recent survey of North American markets by Colliers International, a global commercial real estate firm. Year-to-date absorption is now 48.2 million square feet, and as a result, Colliers has revised downward its forecast for industrial absorption in 2004 and now believes the market will absorb only

110 million to 120 million square feet during the year, down from its earlier prediction of 150 million square feet.

Although the industrial real estate market did not absorb as much space during the first half of the year as earlier anticipated, it is still a considerable improvement over 2003. Absorption in 2004 has nearly equaled the absorption from 2003, and most markets are forecasting that demand will stay at current levels or higher for the remainder of 2004.

Rents held steady during the second quarter, with most cities showing little or no change. No significant movement on rents is predicted until 2005.

During the second quarter of 2004, new construction totaled 28.0 million square feet, down slightly from 30.7 million in the first quarter. Another 60.0 million square foot is under construction and anticipated to be completed during the second half of the year.

Retail and Other Commercial Markets

Retail spending should benefit from the upturn in employment, which is putting spending power into more pockets. Consumers appear likely to continue heading for "big-box" and discount stores while steering clear of shopping malls. According to a recent *Wall Street Journal* story, citing Property & Portfolio Research, Inc., Wal-Mart will open 380 stores in 2004, Home Depot 175, Lowes 140, and Target will create 23 Super Targets. These stores will take sales from other discounters (K-Mart has closed 600 stores), mall-based department stores (Lord & Taylor is closing 31 stores) and specialty stores (182 Kids R Us stores and 90 Eddie Bauer stores are closing), and grocery stores, a retail construction component that has been nearly stagnant for six years.

Grocery stores have lost share as well to eating out, but the dining/drinking and fast food construction segments remain volatile. For example, fast-growing Krispy Kreme announced in May that the low-carb trend had hurt its sales and it would open 100 stores rather than the 120 it had planned in 2004. In contrast, the gourmet coffee niche is still growing.

Hospitality Market

No sector has been battered more than hotels, which have not recovered traction since the terrorist attacks of September 11, 2001, caused consumers to reduce their travel. The slow economy and job losses have kept demand soft for both leisure and business travel and the numbers tell the tale: Revenue per available room (RevPar) has been plunging for three years, as have average room rates and occupancy rates.

On the bright side, PricewaterhouseCoopers forecasts RevPar to increase by 6.3 percent in 2004, the largest increase in 20 years. The 3.7 forecast increase in average daily rate in 2004 will contribute almost 60 percent of the total forecast RevPar gain for the year. According to PricewaterhouseCoopers, many factors support the favorable outlook for ADR:

1. Upward revisions to inflation forecasts.
2. Acceleration of business travel and the consequent increase in higher-rate lodging demand.
3. Consolidation of ownership and, therefore, more properties under pricing discipline.
4. Dramatic increase in control being exercised by hotel companies and owners over rate integrity and inventory, leading to less discounting on third-party distribution channels.
5. Aftermath of hurricanes in Florida, generating room demand from people involved in damage assessment, insurance, and reconstruction in otherwise low-occupancy months, with especially positive effects on room rates.

The lodging expansion that is underway will bring lodging demand to 2.71 million daily occupied rooms in 2004, or 2.1 percent above the previous peak level recorded in 2000. With supply expanding by only 1.3 percent in 2004 amid 3.7 percent demand growth, occupancy will advance to 60.6 percent, an increase of 1.5 occupancy points from 2003.

Lodging construction flattened out at $11 billion in 2002 and 2003. The private portion (90 percent of the total) has tumbled

40 percent since 2000 and slipped another 4 percent in the first quarter of 2004 compared to the same period of 2003.

Nevertheless, the slump may be ending. Lodging construction in April 2004 was 6 percent ahead of the figure for April 2003, putting the year-to-date total ahead of the same period of 2003. Business travel is starting to revive; the Federal Aviation Administration reported that the summer of 2004 was the busiest in the air since 2001. In addition, the growth in foreign economies and the strengthening euro and yen relative to the dollar should bring more foreign business and leisure visitors to the United States in 2004. The upturn in lodging is likely to start with renovations of existing properties, followed in 2005 by more new construction.

Help Desk—The demand for construction can vary significantly among different geographic regions. One of the most comprehensive analyses of commercial real estate demands and construction activity is published by the Society of Industrial and Office Realtors (SIOR). Annually, SIOR publishes *Comparative Statistics of Industrial and Office Real Estate Markets*, which provides detailed real estate and construction statistics on all the country's larger cities. You can purchase and download this publication directly from the publications section of the SIOR Web site at www.sior.com.

Public Construction

Public construction prospered in recent years while the overall economy struggled. That's because there are multiple lags associated with public construction. Siting, permitting, design, and bid awards all add delays, and construction itself is often complex and drawn out for public projects. As a result, public construction has remained strong until recently, even though income and sales tax revenues have been tumbling for several years.

But the public construction sector is coping with state-level fiscal crises. It is important to recognize that more than 90 percent of public sector construction activity is carried out by the state and local governments. As a result, the fiscal conditions of state governments largely dictate their ability to carry out construction activity. The sustained period of anemic economic growth has caused historic budget deficits at the state level. And the budget chopping that governors, legislatures, county councils, and mayors have been engaging in will show up in public construction. As current projects wrap up, there will be a far lower level of activity for the next two years, according to industry analysts.

On the bright side, however, public construction rebounded 0.6 percent from a dip in May and June to match April's record level. The July 2004 level was 4.6 percent higher than a year before.

Surety Industry Trends

The surety industry is critical to the well-being of the construction industry. Nearly half of all work performed by contractors is bonded, so any change in the surety market will have a significant effect on the construction industry.

The surety industry has weathered the turbulent times of the late 1990s and the first years of the 21st century, and has come through intact and on course for a potential recovery. The large losses faced by the industry in the past few years served as a wakeup call to the industry. By returning to the fundamentals, namely solid underwriting practices, many experts believe that the industry is heading toward recovery.

Even though there have been a number of high-profile mergers in the surety market, capacity remains sufficient to support the nation's construction needs. However, contractors in different market sizes may see changes in the near future.

- Capacity for small and emerging contractors remains available, though they will be subject to the same underwriting standards as their larger peers. Small and start-up contractors who have difficulty meeting today's underwriting standards may opt to explore the U.S. Small Business Administration's Surety Bond Guarantee Program.
- The mid-market contractor is least likely to be affected by capacity issues. This segment is the primary target of the industry, and qualified contractors will continue to receive strong support. However, in some cases, contractors are

being required to provide audited financial statements instead of reviewed financial statements, and some sureties are requiring quarterly reporting. The same back-to-basics underwriting standards apply: Quality financials, capital retention, and personal and corporate indemnity are all required.

- Contractors in the $250 million-and-over market may need to address changes in the industry. Surety companies are less likely to assume the risks of massive, multiyear projects on their own. Co-sureties, segmented bonding, and joint ventures may be more common, due to the fact that approximately 80 percent of the reinsurers from the 1990s are gone because of the massive surety losses incurred in the past few years. The tightened reinsurance market is a factor in the need for more creative surety solutions on mega-projects.

"Cautious optimism" is the phrase most commonly used to describe the near future. While the industry incurred nearly $1.3 billion in contract surety claims in 2003, according to the Surety Association of America, many in the industry foresee the possibility of moderate profitability within the next few years.

The "cautious" in cautious optimism stems in large part from uncertainties about the nation's economy. While the construction market has grown strongly in recent months, the effects of rising prices for gasoline, steel, and other construction-related commodities remain a concern. If economic conditions decline for contractors, the domino effect on claims may negatively affect the surety industry's bottom line. In addition, recent headlines about improper commissions at the agency level could cause some chaos in the surety market in the future.

There are also alternatives to surety, generally referred to as alternate products. These insurance products were originally designed to protect a general contractor from subcontractor default. Unlike a surety bond, an alternate product has a deductible and guarantees payment in the event of default, but not performance. Although this is a relatively new concept, some think it may be a way to circumvent some of the limitations of the surety industry.

Underwriters talk about their desire to "get back to basics." That means that they are going to be willing to provide surety credit to only well-managed firms that are adequately financed and experienced, and that have a clear vision and a means to reach that vision. Underwriters are insisting on profitable operations and retention of profits to support the operations. They want to see owners who are involved in daily management and committed to the success of the business.

None of this should come as a surprise. The good news is that those who do what they need to do to qualify for surety credit will find there is less competition from unqualified contractors. The sureties are doing what they are supposed to do and are raising the bar for entry into the construction industry.

At this critical juncture in the surety industry's life cycle, the following steps may be helpful to ensure that your client's surety relationship remains free from any dramatic exposure to the surety industry's changes. Your client may need to:

- Meet regularly with its surety underwriters and foster a partnering relationship.
- Know its surety—its results, reinsurance, capacity limitations, credit, and AM Best (a worldwide insurance-rating and information agency) ratings.
- Plan for more lead time for larger or unique projects and major decisions.
- Provide high-quality and timely financial information.
- Understand the adjustments that the surety makes to the financial statements to arrive at bonding capacity.
- Involve its surety in major financial decisions.
- Understand the working capital and equity requirements for your bonding program (single and aggregate limit).
- Use a professional CPA and attorney who specialize in surety.
- Use a professional surety broker who specializes in surety, and have a "backup" surety available in case the current surety is unable to provide proper coverage.

Construction Cost Trends

Last year, the annual inflation for wallboard, PVC, drywall, fiberglass, and lumber hit new heights. This year, with OPEC restraining oil production and the price of crude oil hitting $50 per barrel, the cost of every phase of construction that is remotely or directly influenced by petroleum has been affected.

Materials

The year began with an explosion in steel prices that reverberated throughout construction. That was followed by aftershocks in lumber, plywood, gypsum wallboard, copper, stainless steel, insulation, and concrete products. The rebound in nonresidential construction markets, strong spending on public works, and record levels of home building pushed up demand for materials and prices along with it. The resulting higher materials prices propelled inflation in the construction industry from 3 percent at the beginning of the year to about 10 percent by September, according to *Engineering News Record*'s building cost index.

Price and availability of materials are not uniform across all kinds of building projects. Many materials suppliers have been feeling the brunt of price changes. In addition, many contractors are taking advantage of deep discounts with payments up-front. And most public works projects have a provision for additional compensation for cost increases.

Cost trends for building materials include the following:

- *Lumber.* After a brief pause in July, lumber prices have continued their upward trend. Prices for the most commonly used type of two-by-fours increased 2.3 percent in August and another 4.7 percent in September, according to *Engineering News Record*'s 20-city average price. These price hikes added to large increases between March and June, leaving overall prices 29 percent higher than one year ago. After falling in July and August, plywood prices rebounded 4 percent in September, pushing the average plywood price 22 percent above 2003's level.

- *Petroleum-based materials.* The war in Iraq, combined with tight U.S. inventories in a rebounding economy, have pushed crude oil prices to levels that have not been seen in decades. While prices have eased somewhat recently, continuing jitters in global oil markets appear poised to have a dramatic impact on the derivative liquid asphalt market. The effect of climbing asphalt prices on the highway construction market is likely to vary considerably by region, depending on refinery type, project and contract structure, and local demand. For some public works projects, contractors don't always have to carry the risk of volatile asphalt prices because many municipalities and state transportation departments have price escalators.
- *Cement products.* During the past decade, portland cement prices have made little upward progress, with spring price hikes usually fading by the end of summer. But strong demand and regional shortages this year have kept prices moving upward throughout the summer. Cement prices began October with another 0.3 percent increase, lifting prices 2.8 percent above 2003's level. This compares to year-to-year October price increases of just 0.1 percent in 2003, 1.1 percent in 2002, 2.0 percent in 2001, and 0.6 percent in 2000.
- *Steel and aluminum.* Steel prices continued to climb during the third quarter after a brief pause in May and June, according to *Engineering News Record*'s average price for wide-flange, channel, and I-beams. The third-quarter 4 percent price increase came on top of huge increases earlier in the year, leaving the average price 26 percent higher than a year ago. Reinforcing bar prices rose another 1 percent in September after climbing 6 percent between July and August. Grade-60 rebar prices are now 45 percent higher than 2003's level, while epoxy-coated rebar prices are up 50 percent.

Labor

While materials price escalation has grabbed most of the headlines, labor costs are also contributing to construction's growing inflationary pressure. The one factor that is not getting a lot of attention, but soon will be, is wage and salary pressure on contractors' prices. As the economy picks up, there is going to be upward pressure on salaries of supervisors, cost engineers, schedulers, and other professionals that are going to be passed along to owners.

In addition, insurers continue to seek higher prices for workers' compensation policies, driving up rates for construction crafts an average of 2.8 percent in 2004 so far. Continuing losses mean insurers will keep the pressure on rates. They would have risen even higher, some believe, were it not for tougher scrutiny of claims that employers and insurers hope will limit payouts.

Construction employment has rebounded strongly from 2002's recession-induced low. In August, there were over 6.9 million white- and blue-collar workers employed in the construction industry, according to the U.S. Labor Department's Bureau of Labor Statistics' seasonally adjusted data. This is 2.8 percent higher than last August and 1.5 percent higher than the previous peak set in 2001. However, most of the employment gains have been centered in the hot residential building market, which helped push employment in the building sector up 4.3 percent above a year ago. Employment in the non-building markets was up just 0.9 percent.

> **Help Desk**—The *Engineering News Record* publishes detailed quarterly cost studies that track average prices for a wide variety of materials and labor classifications in major cities across the country. You can access summaries of the studies at the magazine's Web site at www.enr.com.

Construction cost trends such as those previously mentioned must be considered in the estimates developed by construction contractors.

Current Audit and Accounting Issues and Developments

Assessing Audit Risks in the Current Environment

Statement on Auditing Standards (SAS) No. 22, *Planning and Supervision* (AICPA, *Professional Standards*, vol. 1, AU sec. 311), provides, among other matters, guidance for auditors regarding the specific procedures that should be considered in planning an audit in accordance with generally accepted auditing standards (GAAS). SAS No. 22 states that the auditor should obtain a knowledge of matters that relate to the nature of the entity's business, its organization, and its operating characteristics, and consider matters affecting the industry in which the entity operates, including, among other matters, economic conditions as they relate to the specific audit.

Business conditions in the construction industry vary greatly across contractor types and from region to region. A contractor in the Southeast faces different issues than a similar contractor located on the Pacific Coast; the risks associated with building hotels differ from those faced by a specialty contractor. For this reason, you must be knowledgeable about contractor types and the location in which the entity operates.

Earnings Management Challenges

As a result of perceived external pressures, companies may be tempted to manage earnings by using nonrecurring transactions or changing key estimates, such as estimated costs to complete, reserves, fair values, and impairments. SAS No. 57, *Auditing Accounting Estimates* (AICPA, *Professional Standards*, vol. 1, AU sec. 342), provides guidance on obtaining and evaluating sufficient competent evidential matter to support significant accounting estimates used in a client's financial statements. Practical guidance on auditing estimates is available in the AICPA Practice Aid *Auditing Estimates and Other Soft Accounting Information* (product no. 010010kk).

In addition, be aware of claims against general contractors by subcontractors and claims against subcontractors by vendors. Companies may also adopt inappropriate accounting practices resulting in improper recognition or omission of financial transactions. For material nonrecurring transactions that may require special disclosure to facilitate readers' understanding of the reported financial results, apply the guidance in Accounting Principles Board (APB) Opinion No. 20, *Accounting Changes*, in reporting the effects of changes in estimates. Inappropriate transactions or accounting practices that may result in errors requiring adjustments of financial statements include, for example, premature recognition of revenue, including improper recognition of claims and change orders that do not meet the criteria of Statement of Position (SOP) 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts*; failure to appropriately accrue for contingent liabilities that are probable and estimable; and failure to record unpaid purchase invoices. In addition, you should be particularly skeptical of fourth-quarter events that result in significant revenue recognition, loss accrual, or noncash earnings, as well as gross profit fade.[1]

The appropriate level of professional skepticism is needed when corroborating management's representations. Management's explanations should make business sense. In addition, you may need to consider corroborating management's explanations with members of the board of directors or the audit committee, and consider gathering other corroborating evidence such as an independent engineering estimate and discussion with other contractors.

Indicators of Heightened Risk

Other indicators of potential increased accounting and reporting risk calling for increased professional skepticism include:

- Bonuses for estimators, project managers, purchasing agents, or supervisors depend on specific criteria (such as budgets, targets, or performance).
- Tax-motivated income or loss goals exist.
- There are ownership disputes, potential sale of business, or contemplated or current divorce situation.
- Management has been unable to accurately project gross profit in the past.

1. Profit fade (the reduction of the estimated gross profit over the life of a contract) is recognized as evidence of a contractor's inability to effectively estimate and/or manage a job. Profit fade is also discussed in the "Job Performance" section of this Alert.

- Loan covenants or bonding equity requirements have either been closely met or barely failed in the past.
- The company is committed (awarded or notified as low bidder) to a large contract in excess of capacity.
- The company is involved in construction projects subject to significant regulatory restrictions (the Environmental Protection Agency, Federal Emergency Management Agency, or federal or state projects).
- The company is undercapitalized, relying heavily on bank loans and other credit, and is in danger of violating loan covenants.
- The company is having difficulty obtaining or maintaining financing.
- The company is having difficulty obtaining surety credit.
- The company is changing significant accounting policies and assumptions to less conservative ones.
- The company is overly optimistic in recognition of deferred tax assets.
- There are increasing amounts of underbillings on the balance sheet.
- The company is generating profits but not cash flow.
- The company has a consistent gross profit fade.
- The company has been entering into new types of projects or new geographic areas.
- The company has been awarded a job much larger than the company has ever done.
- The company is experiencing high employee turnover.
- The company has been awarded a job that has a dramatic difference in bid spread.
- There has been a significant change in senior management or the board of directors.

Auditing Construction Contracts

In auditing commercial entities, the auditor usually emphasizes procedures directed at the reasonableness of the opening and closing balance sheets. Auditors of construction contractors should recognize that the traditional balance sheet approach to auditing usually is not adequate when performing an audit of a contractor. In the audit of a construction contractor's financial statements, your primary concern is ascertaining the reasonableness of the estimated gross margin of each contract and the recognition and measurement of gross margin for the period. Therefore, the more effective audit approach requires you to focus on the terms, financial estimates, and results of individual contracts, rather than the contract-related balance sheet that accounts for the company as a whole.

High inherent risk often is associated with management's judgments underlying estimates that affect not only the amount and timing of revenue and expense, but also the resultant balances in various asset and liability accounts. In auditing the financial statements, you should keep in mind how contract accounting affects the key relationships between accounts. For example, depending on the method of accounting used, the measurement of progress toward completion can affect the determination of revenues, cost of revenues, accounts receivable, unbilled receivables, retentions receivable, and inventory.

The authoritative guidance on auditing contractors is contained in the AICPA Audit and Accounting Guide *Construction Contractors*. Included in this Audit and Accounting Guide is SOP 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts*, which is the primary authoritative accounting guidance for construction contractors.

Auditing construction contractors is complex. Such businesses rely on accurate and reliable estimates to operate their business as well as to prepare financial statements. Therefore, it is critical that you gain an understanding of the contractor's significant estimates and assumptions used in operating the business. Remember that the audit of a construction contractor's financial statements is an audit of the contractor's ability to estimate, both bidding the project and estimating costs to complete while the job is in progress.

There are several things to consider when auditing estimates: understand the internal control structure surrounding the estimate, consider the contractor's history of accurate estimates, compare actual to budgeted figures, and review subsequent events.

In Practice Alert 00-3, *Auditing Construction Contracts*, the AICPA Professional Issues Task Force has identified the following procedures to consider when performing an audit of a construction contractor:

- *Read significant contracts.* This may seem obvious, but it is necessary to identify the terms of the contract, any guarantees, penalties, or incentives, as well as cancellation and postponement provisions. For example, reading the contract might help you identify the party responsible for additional expenses incurred as a result of weather delays.
- *Identify unique contracts.* Increase the amount of testing and professional skepticism related to these contracts because they increase the risk of improper estimates and, thus, improperly stated financial statements. This should include a review for combined and segregated contracts. If a company cannot reasonably estimate the cost or progress of a contract, it should account for the contract under the completed-contract method.
- *Understand the company's cash flow and how the company manages expenses.* In this industry, expenses are often payable before receiving the related cash from the contract revenue. Therefore, understanding how to realistically anticipate and manage cash flow and expenses can become critical for survival. Unfortunately, some companies win long-term contracts but cannot fund the projects long enough to realize any profit.
- *Recognize that the length of the contract period can directly affect the quality of related estimates on contracts.* The longer the contract period, the greater the risk that an estimate

will be incorrect. Also, the closer a contract is to completion, the less risk there is of an incorrect estimate. Finally, the more variables inherent in an estimate, the greater the risk that an estimate will be incorrect.

- *Confirm the terms and conditions of the contract as well as the normal billing procedures.* When confirming a receivable, strongly consider confirming the original contract price, total approved change orders, total billings and payments, retainage held and whether it accrues interest, detail of any claims, back charges, or disputes, and estimated completion date or the estimate of percentage of completion as of the audit date. Keep in mind that any confirmation of percentage of completion is most likely based upon an "output" measurement of percent complete, as compared to the contractor's measurement, which is the cost-cost measurement, an "input" measurement. In many cases, these percentages should be similar, unless there are significant uninstalled materials or outside fabrication.
- *Review the unapproved change orders of significant contracts.* Change orders often arise during the life of a contract, and it is necessary to adjust estimated revenue and cost for change orders that have been approved, for both scope and price. However, when a change order has been approved for scope but not price, carefully evaluate the specific facts and circumstances before including the order in estimated contract revenues. To the extent that change orders are disputed or are unapproved for both scope and price, evaluate them as claims. Generally, recognize revenue on an unapproved change order or claim only if there is verifiable evidence to support it.
- *Visit construction contract sites.* Visiting contract sites can be a very useful audit procedure. Such a visit can provide an opportunity to view the progress of a contract and confirm that the job is progressing in accordance with the plans, specifications, and terms of the contract. Site visits might be warranted for significant contract sites where work is in the very early stages of the contract. Such a visit may help

you identify the complexities of performing the contract. The site visit may also provide you with the opportunity to interview operational personnel and gain a better understanding of the responsibility the company has for performing the contract. At the site visit, it also might be helpful to speak with available subcontractors to get additional information about the progress of the contract. You may also be able to speak with a representative of the owner of the project. Furthermore, you should consider observing equipment and uninstalled inventory at the site. You may also obtain evidence that the job actually exists! The use of specialists for certain site visits may be warranted, especially on high risk contracts.

- *Meet with project managers and other personnel.* Project managers play an important role in controlling and reporting job site costs. They are also close to the facts and are likely to get prompt and accurate information related to particular contracts. Meeting with the project managers will assist you in developing your plans for performing analytical procedures. It is also important to meet with other personnel who report to the project manager. In some cases, the project manager's compensation is based on job performance and, information from other personnel may be useful to support the project manager's estimates.

- *Identify and understand the significant assumptions and uncertainties.* This is fundamental to performing an effective audit of an entity using contract accounting.

- *Test contract costs to make sure that costs are matched with appropriate contracts.* In some instances, companies may shift costs from unprofitable contracts to profitable ones, or shift costs from completed contracts to jobs in progress, to defer losses.

- *Audit estimates on uncompleted contracts.* The focus should be on the key factors and assumptions, such as those that (1) are significant to the estimate, (2) are sensitive to variation, (3) deviate from historical patterns, and (4) are subjective and susceptible to bias or misstatement. It is also useful to review revised or updated estimates of costs to complete and compare estimates with actual costs incurred after the balance sheet date.

- *See that losses are recorded as incurred,* regardless of whether the entity is using the percentage-of-completion or the completed-contract method of recognizing revenue.
- *Analytically review contracts completed and in progress.* A detailed analytical review of profit margins on completed contracts and contracts in progress will provide meaningful information as you focus your efforts on potential problem areas. You also need to remember that it is important to form appropriate expectations when performing analytical review. Gross profit percentages on completed and uncompleted contracts should be similar. Significant differences should be investigated. Continuous reporting, year after year, of gross profit on uncompleted contracts that is greater than the gross profit experienced on completed contracts indicates job fade and should not be permitted to continue unadjusted.
- *Audit contracts that are larger than normal.* Often, contractors that take on jobs that are beyond their capacity get into serious trouble because of inadequate internal control and accounting systems, and inexperienced project managers and estimators, among other things.
- *See that there are appropriate disclosures relating to SOP 94-6,* Disclosure of Certain Significant Risks and Uncertainties. Entities using contract accounting should have more than generic disclosure about the use of significant estimates in the preparation of financial statements.
- *Review the aging of receivables on contracts.* This will provide evidence that the company is collecting funds on a timely basis.
- *Review gross profit on backlog.* Gross profit on backlog should be factored in and compared to next year's overhead.

- *Review current work in progress reports.* This procedure should be performed before issuing the financial statements.

You can view this and other Practice Alerts at http://www.aicpa.org/members/div/auditstd/pract_alerts.asp.

Although all of these procedures are important, it is important for you to use your professional judgment in designing procedures specific to your particular clients and their contracts. In addition to the above procedures, you should consider the following areas.

Industry averages. You should compare gross profit percentages on uncompleted contracts to the averages for the industry and to gross profit percentages of completed contracts. If the contractor engages in multiple trades, be sure to make comparisons by trade.

Costing methods. You should examine and test the system used to charge job costs, including equipment costing rates, and methods used to charge labor, materials, and indirect costs.

Fade analysis. You should prepare or examine a historical contract fade analysis.[2] A trend of overly optimistic forecasting can indicate poor estimates by management.

Information and communication. Management should receive detailed financial statements, job schedules, accounts receivable schedules, and cash summary reports. Management will be ineffective if not well-informed. For small contractors, the controller should meet regularly with management and operations personnel. For larger contractors, the contract management department and accounting department should communicate regularly. There should also be a mechanism for reconciling and resolving differences.

Debt

You should carefully review loan agreements and test for compliance with loan covenants. In this regard, consider any "cross default" provisions, that is, a violation of one loan covenant that

2. A fade analysis is a schedule that tracks estimated profitability over the life of a contract.

affects other loan covenants. Keep in mind that any debt with covenant violations that are not waived by the lender for a period of more than one year from the balance sheet date may need to be classified in the balance sheet as a current liability. Also, a recent trend is for banks to charge substantial fees for issuing waiver letters. You should inform your clients of the possibility of a fee before requesting a waiver.

Keep in mind that, because of favorable tax treatment in 2004, many contractors made significant purchases of construction equipment. This will need to be considered when reviewing your client's debt load and equipment capacity/utilization.

As always, review the debt payment schedules and consider whether the company has the ability to pay current debt installments or to refinance the debt if necessary. When making an evaluation, it is important to remember that it is quite possible that the company will not generate as much cash flow as it did in previous years.

Going Concern

The concept that financial statements are prepared on the basis of a going concern is one of the basic tenants of financial accounting. Indicators that there could be substantial doubt about the ability of the entity to continue as a going concern include the following:

- Negative trends such as recurring operating losses, working capital deficiencies, or negative cash flows from operating activities.
- Other indications of possible financial difficulties such as loan covenant violations or denial of usual trade credit from suppliers and denial of surety credit.
- Internal matters such as labor difficulties; turnover in key positions such as CFO, controller, or project mangers; or substantial dependence on the success of a particular project.
- Lack of significant backlog to cover overhead.
- External matters such as legal proceedings or an uninsured catastrophe.

In addition to these matters, the current uncertain economic situation may cause you to have a heightened sense of awareness of a company's ability to continue as a going concern. SAS No. 59, *The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern* (AICPA, *Professional Standards*, vol. 1, AU sec. 341), as amended, addresses your responsibilities to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern.

You should first test to see if the gross profit in the backlog will be sufficient to carry the company through the remainder of the next fiscal year. You should be careful in this evaluation if the client's history indicates significant gross profit fade. If this is the case, the analysis should be discounted when making an overall evaluation of the entity's ability to continue as a going concern.

Many contractors are seeing very large increases in their insurance rates. Some contractors cannot obtain commercial general liability insurance or find that it is available from only one or a few carriers. Such situations will affect the contractor that has a long-term contract bid initiated when insurance rates were lower and could call into question the going-concern assumption for a contractor that cannot obtain insurance.

You should also be aware of other issues, such as the following:

- *Inadequate capitalization.* Many construction contractors underestimate how much capital is needed to start and sustain a business. Tangible working capital less than 5 percent of annual revenues and a poor banking relationship will contribute to poor cash flow. In addition, the method used to finance long-term assets can impair continuing operations. For example, a contractor who purchases a large amount of equipment and finances it through short-term debt will reduce working capital by the total cost of the equipment, which will affect the contractor's bonding capacity.
- *High employee turnover.* Estimators, project managers, and superintendents are critical to the success of a contractor. High turnover in key positions will result in lower job profitability and potential bidding errors.

- *New types of projects.* Each type of construction requires unique skills and specialties. When contractors venture into new areas (for example, a highway contractor decides to build an office building), new business risks and issues arise.
- *Increase in job size.* New risks and challenges arise when contractors bid on jobs substantially larger than normal.
- *New geographic areas.* A contractor in South Carolina faces different issues than a contractor in Montana. Logistically, it is more difficult to manage a contract thousands of miles away. In addition, labor supply, subcontractor quality, suppliers, codes and regulations, lien laws, tax laws, weather and soil conditions can be dramatically different and, accordingly, may result in unforeseen costs and problems.
- *Rapid growth.* If a contractor does not have the infrastructure to support rapid growth, it may suffer significant losses. By growing too fast, the company will spread its project managers too thin, promote inexperienced employees, or be forced to hastily hire inexperienced project managers. If controls are inadequate, the company may experience problems with delayed or inaccurate billing, inaccurate financial information, poor project estimation, and cash flow problems.

In summary, when evaluating management's plans to continue as a going concern, an appropriate level of professional skepticism is important. For example, the company's assumptions about its ability to continue as a going concern should be scrutinized to assess whether they are based on overly optimistic or "once-in-a-lifetime" occurrences.

Job Performance

When projects are not completed on time, it is difficult for contractors to be profitable. Some contracts may even require that the contractor pay penalties if the job is not completed by a specified date. Jobs that are significantly behind their established timetable may require additional audit attention and procedures to determine that the original estimates of gross profit have not deteriorated (profit fade) and that the job has not incurred a loss (which should be recognized immediately).

In reviewing your client's contracts, be alert to problems caused by employee turnover or lack of adequate staffing. If your client has lost a key employee or seems to lack enough personnel to complete the projects it has committed to, consider making inquiries of management to determine how the client has factored these circumstances into the estimation process.

For contractors that are experiencing layoffs and increased turnover, it may require some time to find a competent replacement for key operational employees who leave the company before the job is completed. The contractor may be forced to use less experienced personnel in certain positions, including management, and that lack of experience can result in the job taking longer to complete and costing more than originally anticipated.

Also, be alert for "disguised payroll costs." With the rising cost of payroll burden, including health insurance and workers' compensation, there is a trend for contractors to hire subcontractors instead of employees. You should look for a large increase in subcontractor costs and consider whether those costs are disguised payroll costs. Should this situation exist, there is an increased risk of those costs being reclassified from subcontractors to employees, with the contractor being assessed with penalties and interest from misreporting.

A disruption in the supply of key materials can also affect the ability of the contractor to complete the project on time. During the past year, most construction materials were in adequate supply. However, the events of recent years have shown that an unexpected or continuing surge in demand for materials can quickly outpace supply and create shortages and delays. In addition, the lead time required for specifically fabricated items may affect the contractor's ability to deliver the project on time.

You might consider performing procedures to identify price hikes in your client's vital materials. Determine whether those price hikes are the result of inadequate supply. If so, assess your client's vulnerability to delays caused by the inability to obtain these materials on a regular and timely basis. Make inquiries to discover what steps the client has taken to mitigate these risks.

Auditing Estimates on Uncompleted Contracts

A contractor's ability to estimate job costs is critical from both an operational and a financial reporting standpoint. Contractors that cannot accurately estimate job costs will be unable to manage their working capital and maintain consistent levels of profitability over an extended period of time. For most contractors, the estimate of costs to complete a project is the fuel that drives revenue recognition. For that reason, inaccurate or unsupported estimates of costs to complete jobs in progress can result in materially misstated financial statements.

When auditing construction estimates, you should be familiar with guidance provided in SAS No. 57, *Auditing Accounting Estimates* (AICPA, *Professional Standards*, vol. 1, AU sec. 342); the AICPA Practice Aid *Auditing Estimates and Other Soft Accounting Information*; SOP 94-6, *Disclosure of Certain Significant Risks and Uncertainties*; and the Audit and Accounting Guide *Construction Contractors.*

Pay close attention to the underlying assumptions used by management when auditing accounting estimates. Management is responsible for making estimates included in the financial statements, and those estimates may be based wholly or in part on subjective factors such as experience of past and current events and expectations of future conditions. Remain alert to the possibility of management's overreliance on economic information based on favorable conditions to predict future outcomes. As part of post balance sheet review, you should consider reviewing the most recent work in progress schedules to test for the accuracy of the estimates.

> **Help Desk**—Marshall and Swift is a consulting firm that provides comprehensive cost data for the construction industry. Included on its Web site is a cost estimator that allows the user to estimate the cost of a project based on current costs in any geographic area. You may find these estimates helpful in performing analytical procedures on client estimates. You can access the cost estimator at www.construction.com.

Consideration of Fraud

SAS No. 99, *Consideration of Fraud in a Financial Statement Audit* (AICPA, *Professional Standards*, vol. 1, AU sec. 316), is the primary source of authoritative guidance about an auditor's responsibilities concerning the consideration of fraud in a financial statement audit. SAS No. 99 establishes standards and provides guidance to auditors in fulfilling their responsibility to plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud as stated in SAS No. 1, *Codification of Auditing Standards and Procedures* (AICPA, *Professional Standards*, vol. 1, AU sec. 110.02, "Responsibilities and Functions of the Independent Auditor"). SAS No. 99 also amends SAS No. 85, *Management Representations* (AICPA, *Professional Standards*, vol. 1, AU sec. 333), as amended.

Two types of misstatements are relevant to the auditor's consideration of fraud in a financial statement audit:

- Misstatements arising from fraudulent financial reporting
- Misstatements arising from misappropriation of assets

Three conditions generally are present when fraud occurs. First, management or other employees have an *incentive* or are under *pressure*, which provides a reason to commit fraud. Second, circumstances exist—for example, the absence of controls, ineffective controls, or the ability of management to override controls—that provide an *opportunity* for a fraud to be perpetrated. Third, those involved are able to *rationalize* committing a fraudulent act.

The Importance of Exercising Professional Skepticism

Because of the characteristics of fraud, your exercise of professional skepticism is important when considering the risk of material misstatement due to fraud. Professional skepticism is an attitude that includes a questioning mind and a critical assessment of audit evidence. You should conduct the engagement with a mindset that recognizes the possibility that a material misstatement due to fraud could be present, regardless of any past experience with the entity, and regardless of your belief about management's honesty and integrity. Furthermore, professional skepticism requires an ongoing questioning of whether the information and evidence obtained suggests that a material misstatement due to fraud has occurred.

Discussion Among Engagement Personnel Regarding the Risks of Material Misstatement Due to Fraud

Members of the audit team should discuss the potential for material misstatement due to fraud in accordance with the requirements of SAS No. 99 (AU sec. 316.14-.18). The discussion among the audit team members about the susceptibility of the entity's financial statements to material misstatement due to fraud should include a consideration of the known external and internal factors affecting the entity that might (1) create incentives/pressures for management and others to commit fraud, (2) provide the opportunity for fraud to be perpetrated, and (3) indicate a culture or environment that enables management to rationalize committing fraud. Communication among the audit team members about the risks of material misstatement due to fraud also should continue throughout the audit.

Obtaining the Information Needed to Identify the Risks of Material Misstatement Due to Fraud

SAS No. 22, *Planning and Supervision*, provides guidance about how you obtain knowledge about the entity's business and the industry in which it operates. In performing that work, information may come to your attention that should be considered in identifying risks of material misstatement due to fraud. As part of this work, you should perform the following procedures to obtain information that is used (as described in SAS No. 99 [AU sec. 316.35-.42]) to identify the risks of material misstatement due to fraud:

1. Make inquiries of management and others within the entity to obtain their views about the risks of fraud and how they are addressed. (See SAS No. 99 [AU sec. 316.20-.27].)
2. Consider any unusual or unexpected relationships that have been identified in performing analytical procedures in planning the audit. (See SAS No. 99 [AU sec. 316.28-.30].)

3. Consider whether one or more fraud risk factors exist. (See SAS No. 99 [AU sec. 316.31-.33] and the Appendix to SAS No. 99).
4. Consider other information that may be helpful in the identification of risks of material misstatement due to fraud. (See SAS No. 99 [AU sec. 316.34].)

In planning the audit, you also should perform analytical procedures relating to revenue with the objective of identifying unusual or unexpected relationships involving revenue accounts that may indicate a material misstatement due to fraudulent financial reporting.

Considering Fraud Risk Factors

You may identify events or conditions that indicate incentives/pressures to perpetrate fraud, opportunities to carry out the fraud, or attitudes/rationalizations to justify a fraudulent action. Such events or conditions are referred to as "fraud risk factors." Fraud risk factors do not necessarily indicate the existence of fraud; however, they often are present in circumstances where fraud exists.

SAS No. 99 provides fraud risk factor examples that have been written to apply to most enterprises. Remember that fraud risk factors are only one of several sources of information you consider when identifying and assessing risk of material misstatement due to fraud. Some examples of fraud risk factors that may exist in the construction industry include the following:

- Fraudulent financial reporting, including:
  - A willingness to shift costs between completed and uncompleted contracts or to use other techniques to manipulate percentage-of-completion estimates
  - Excessive under- or overbillings on individual jobs
  - A large number of contract performance problems
  - A large increase in inventory
  - Recognizing revenues from claims and unapproved change orders before allowance by generally accepted accounting principles (GAAP)

- A significant portion of employees' or owners' compensation represented by bonuses, the value of which is contingent on the contractor's achieving unduly aggressive financial targets

- Misappropriation of assets, including:
  - Tools, equipment, and supplies that are susceptible to misappropriation
  - Lack of management review and control over disbursements such as payroll and material purchases that can be used to misappropriate cash

The general state of the economy may raise several fraud risk factors. For example, a significant fraud risk factor to consider is whether management may be under substantial pressure to intentionally underestimate the costs to complete contracts to accelerate income. Other fraud risk factors for management include pressure to obtain additional capital, obtain additional bonding capacity, or maintain current debt covenants at their stated levels.

Identifying Risks That May Result in a Material Misstatement Due to Fraud

In identifying risks of material misstatement due to fraud, it is helpful to consider the information that has been gathered in accordance with the requirements of SAS No. 99 (AU sec. 316.19-.34). Your identification of fraud risks may be influenced by characteristics such as the size, complexity, and ownership attributes of the entity. In addition, you should evaluate whether identified risks of material misstatement due to fraud can be related to specific financial-statement account balances or classes of transactions and related assertions, or whether they relate more pervasively to the financial statements as a whole. Certain accounts, classes of transactions, and assertions that have high inherent risk because they involve a high degree of management judgment and subjectivity also may present risks of material misstatement due to fraud because they are susceptible to manipulation by management.

A Presumption That Improper Revenue Recognition Is a Fraud Risk

Material misstatements due to fraudulent financial reporting often result from an overstatement of revenues (for example, through premature revenue recognition or recording fictitious revenues) or an understatement of revenues (for example, through improperly shifting revenues to a later period). Therefore, you should ordinarily presume that there is a risk of material misstatement due to fraud relating to revenue recognition (see SAS No. 99 [AU sec. 316.41]).

The following are examples of how revenue may be recognized improperly by construction contractors:

- The revenue recognition process for construction contractors using the percentage-of-completion method is often based on an estimate of total cost. Underestimation of total contract cost would present the contract as more complete than it really is and, as a consequence, would result in excess gross profit on the job and acceleration of the revenue recognition process. Preparation of accurate work in process schedules is essential for proper revenue recognition. You should select certain job sites for observation and discussion of stage of completion with engineering personnel. Contracts under 10 percent complete and over 90 percent complete generally present less risk. This is simply because those under 10 percent complete have relatively little revenue recognized based on the estimates. Those over 90 percent complete are at a stage where most of the costs have been incurred, and therefore the risk of revenue manipulation is minimized at this point.

- Revenue recognition may be accelerated if a contractor reclassifies inventory and prepaid amounts to current job costs to satisfy working capital requirements of bonding companies.

- Contractors also may accelerate revenue recognition by inappropriately charging to a job the entire cost of capitalizable construction equipment all at once, instead of capitalizing this equipment, depreciating it over its useful life, and allocating to the job just an applicable portion of depreciation expense. When a contractor uses the percentage-of-completion method, this will accelerate the revenue recognition process by increasing costs incurred to date. In an effort to further increase its revenues, the construction contractor may also attempt to charge its client for equipment that may be used on several jobs, either by submitting change orders for fixed-price contracts or by simply including this equipment among costs for time-and-materials contracts.

- If the contractor has adopted the accounting policy that allows for total costs recognition on claims receivable, the amount to be recognized should be limited to the actual costs incurred deemed to be realizable. Often, claims information is based on estimates prepared by outside consultants who are preparing for litigation. Those estimates generally include costs that are not recognizable under SOP 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts*, and care needs to be exercised to ensure that amounts recognized are limited to the actual costs incurred.
- Some construction contractors may assert the inability to estimate costs in an attempt to justify continued use of the completed-contract method allowed in SOP 81-1 under such circumstances. Such claims may have had some validity decades ago when estimates were done by hand. However, the abundance of off-the-shelf software that assists in making estimates and tracking costs on contracts renders most of such claims invalid. To obtain the contract from the owner, the contractor had to prepare an estimate. If the contractor was able to submit an estimate to get the job, it is hard to argue that it cannot come up with an estimate when the contractor is actually on the job site and performing construction activities.

A Consideration of the Risk of Management Override of Controls

Even if you do not identify specific risks of material misstatement owing to fraud, there is a possibility that management override of controls could occur. Accordingly, you should address that risk apart from any conclusions regarding the existence of more specifically identifiable risks. SAS No. 99 specifically describes procedures that should be performed to further address the risk of management override of controls. These procedures include (1) examining journal entries and other adjustments for evidence of possible material misstatement owing to fraud, (2) reviewing accounting estimates for biases that could result in material misstatement owing to fraud, and (3) evaluating the business rationale for significant unusual transactions.

Assessing the Identified Risks After Taking Into Account an Evaluation of the Entity's Programs and Controls That Address the Risks

You should comply with the requirements of SAS No. 99 (AU sec. 316.43-.45) concerning an entity's programs and controls that address identified risks of material misstatement due to fraud.

You should consider whether such programs and controls mitigate the identified risks of material misstatement due to fraud or whether specific control deficiencies exacerbate the risks. After you have evaluated whether the entity's programs and controls have been suitably designed and placed in operation, you should assess these risks taking into account that evaluation. The assessment should be considered when developing your response to the identified risks of material misstatement due to fraud.

Responding to the Results of the Assessment

SAS No. 99 (AU sec. 316.46-.67) provides requirements and guidance about your response to the results of the assessment of the risks of material misstatement due to fraud. You respond to risks of material misstatement due to fraud in the following three ways:

1. A response that has an overall effect on how the audit is conducted—that is, a response involving more general considerations apart from the specific procedures otherwise planned (see SAS No. 99 [AU sec. 316.50]).

2. A response to identified risks involving the nature, timing, and extent of the auditing procedures to be performed (see SAS No. 99 [AU sec. 316.51-.56]).

3. A response involving the performance of certain procedures to further address the risk of material misstatement due to fraud involving management override of controls, given the unpredictable ways in which such override could occur (see SAS No. 99 [AU sec. 316.57-.67]).

Evaluating Audit Evidence

SAS No. 99 (AU sec. 316.68-.78) provides requirements and guidance for evaluating audit evidence. You should evaluate whether analytical procedures that were performed as substantive tests or in the overall review stage of the audit indicate a previously unrecognized risk of material misstatement due to fraud. You also should consider whether responses to inquiries throughout the audit about analytical relationships have been vague or implausible, or have produced evidence that is inconsistent with other evidential matter accumulated during the audit.

At or near the completion of fieldwork, you should evaluate whether the accumulated results of auditing procedures and other observations affect the assessment of the risks of material misstatement due to fraud made earlier in the audit. As part of this evaluation, the auditor with final responsibility for the audit should ascertain that there has been appropriate communication with the other audit team members throughout the audit regarding information or conditions indicative of risks of material misstatement due to fraud.

Responding to Misstatements That May Be the Result of Fraud

When audit test results identify misstatements in the financial statements, you should consider whether such misstatements may be indicative of fraud. See SAS No. 99 (AU sec. 316.75-.78) for requirements and guidance about your response to misstatements that may be the result of fraud. If you believe that misstatements are or may be the result of fraud, but the effect of the misstatements is not material to the financial statements, you nevertheless should evaluate the implications, especially those dealing with the organizational position of the person(s) involved.

If you believe that the misstatement is or may be the result of fraud and either have determined that the effect could be material to the financial statements or have been unable to evaluate whether the effect is material, you should:

1. Attempt to obtain additional evidential matter to determine whether material fraud has occurred or is likely to have occurred, and, if so, its effect on the financial statements and your report thereon.[3]

2. Consider the implications for other aspects of the audit (see SAS No. 99 [AU sec. 316.76]).

3. Discuss the matter and the approach for further investigation with an appropriate level of management that is at least one level above those involved, and with senior management and the audit committee.[4]

4. If appropriate, suggest that the client consult with legal counsel.

Your consideration of the risks of material misstatement and the results of audit tests may indicate such a significant risk of material misstatement due to fraud that you should consider withdrawing from the engagement and communicating the reasons for withdrawal to the audit committee or others with equivalent authority and responsibility. You may wish to consult with legal counsel when considering withdrawal from an engagement.

3. See Statement on Auditing Standards (SAS) No. 58, *Reports on Audited Financial Statements* (AICPA, *Professional Standards*, vol. 1, AU sec. 508), for guidance on auditor's reports issued in connection with audits of financial statements.

4. If you believe senior management may be involved, discussion of the matter directly with the audit committee may be appropriate.

Communicating About Possible Fraud to Management, the Audit Committee, and Others

Whenever you have determined that there is evidence that fraud may exist, that matter should be brought to the attention of an appropriate level of management. See SAS No. 99 (AU sec. 316.79-.82) for further requirements and guidance about communications with management, the audit committee, and others.

Practical Guidance

The AICPA has issued additional guidance on the implementation of SAS No. 99, including *Fraud Detection in a GAAS Audit: SAS No. 99 Implementation Guide* (product no. 006613kk), and CPE courses titled *Fraud and the Financial Statement Audit: Auditor Responsibilities Under New SAS* (product no. 731810), *Auditing for Internal Fraud* (product no. 730237kk), and *Identifying Fraudulent Financial Transactions* (product no. 730243kk). The 2004 edition of the AICPA Audit and Accounting Guide *Construction Contractors* (product no. 012584kk) includes a detailed discussion of SAS No. 99 tailored specifically for the construction industry.

> **Help Desk**—The AICPA's Antifraud Resource Center, at www.aicpa.org/antifraud, is an online resource providing comprehensive tools, information, and resources devoted to the prevention, detection, and investigation of fraud.

The following exhibits illustrate potential fraud techniques in the construction industry. Exhibit 2, "Potential Timing Manipulation Techniques," illustrates how a contractor may manipulate timing of recognition and the related financial statement effects. Exhibit 3, "Potential Measurement/Valuation Manipulation Techniques," illustrates how a contractor may manipulate the measurement of valuation of certain financial statement items and the related financial statement effects.[5]

5. These exhibits were developed by Eric P. Wallace, CPA, and are used by permission.

EXHIBIT 2 Potential Timing Manipulation Techniques

Account Type	*Name of Specific Account*	*Technique*	*Financial Statement Effects*
Asset	Inventory	Report inventory, but not associated accounts payable.	Overstate assets.
Asset	Accounts receivable	Report retainage as accounts receivable.	None, but can influence loan covenants, enabling contractor to borrow more on line of credit.
Asset	Accounts receivable or retainage	Report claims and unapproved change orders as retainage or accounts receivable.	Overstate assets and revenues.
Asset	Costs and estimated earnings in excess of billings on uncompleted contracts	Underestimate costs to complete. Associate costs for completed contracts to uncompleted contracts.	Overstate assets and revenues.
Liability	Billings in excess of costs and estimated earnings on uncompleted contracts	Underestimate costs to complete.	Understate liabilities and overstate revenues.
Liability	Estimated losses on uncompleted contracts	Understate expected loss on open uncompleted contracts.	Understate liabilities and job costs.
Revenue	Contract revenue	Move costs on completed contracts to uncompleted contracts.	Overstate revenues and assets.
Revenue	Contract revenue	Increase expected total contract amount by unpriced and unapproved change orders or claims.	Overstate revenues and assets.
Expense—Job costs	Job costs accounts	Recognize job costs before installation or performance of service on profitable contracts.	Overstate revenues and assets.
Expense—General and administrative	Any G&A accounts	Do not record G&A expenses and associated accounts payable.	Understate expenses and liabilities.

EXHIBIT 3 Potential Measurement/Valuation Manipulation Techniques

Account Type	*Name of Specific Account*	*Technique*	*Financial Statement Effects*
Asset	Accounts receivable	Understate allowance for doubtful accounts.	Overstate assets, understate expenses.
Asset	Accounts receivable, or over- or underbilling accounts	Improperly bill and measure change orders or claim or contracts.	Overstate assets and revenues.
Asset	Costs and estimated earnings in excess of billings or uncompleted contracts	Recognize percentage of completion by any method other than cost-to-cost (preferred by sureties).	Can affect timing in addition to distorting measurement of assets and revenues.
Liability	Billings in excess of costs or uncompleted contracts	Measure competition by cost-to-cost, but contractor does not include certain job costs.	Can affect calculation of percentage of completion.
Expenses—Job costs	Overhead accounts, such as labor, equipment, and general overhead	Manipulate asset and revenue effect of these costs pools.	Overstate assets or revenues.
Revenue and expenses	Revenue and expenses of joint ventures (JVs)	Leave off reporting of JVs, report JV revenue and expenses in a manner different (calculation of percentage of completion) from main financial statements, or recognize improper percentage of ownership of JVs than actual ownership.	Either over- or understate revenues, expenses, assets, and liabilities.
Asset	Equipment	Report property, vehicles, and/or equipment at current fair value instead of at cost less accumulated depreciation.	Overstate assets.
Revenue	Contract revenues	Report in advance full amount of gross profit on uncompleted contracts.	Overstate assets and revenues.

Cost Shifting

Cost shifting is an accidental or deliberate misstatement in a contractor's job cost system that can have a substantial impact on the contractor's balance sheet and income statement. The most dangerous type of cost shifting involves moving or misdirecting job costs from an unprofitable job to a profitable job. Cost shifting occurs most frequently when field-level managers attempt to manipulate contract profitability.

The effect on the balance sheet from cost shifting is that underbillings (costs and estimated billings in excess of billings) increase and overbillings (billings in excess of costs and estimated earnings) decrease. However, if a loss contract is involved, then the accrued liability for loss will be affected which in turn will affect deferred taxes if an entity is a C-corporation. Underbillings should be rare, especially on contracts that are over 50 percent complete. You should look at underbillings skeptically and investigate each underbilling carefully.

Traditional audit procedures will not detect cost shifting. Tests designed to search for unrecorded liabilities or to detect improper cutoff will only provide assurance that all costs have been reported in the proper period. Tests designed to locate improperly booked billings or receivables will detect no exceptions. Audit test work for cost shifting must focus on the accuracy of job costing procedures as well as on the cost classification and coding process.

Intentional cost shifting constitutes fraud. As the audit is designed to provide reasonable assurance that the statements are free of material misstatement caused by fraud, you must test contract costs and understand internal control systems. You should consider the following steps in this regard.

Test job costs for accuracy. Every audit of a construction contractor should include tests of contract costs and related cost coding.

Compare job costs to bid documents. Since contractors should estimate contract costs in the same manner in which they record job costs, you should test job costs for significant contracts by comparing each item of job cost to the original cost estimate. In addition, field personnel can shift costs by directing a subcontractor to invoice the wrong contract. Audit tests that compare subcontract costs to original bid documents are designed to detect this type of cost shifting.

Test revised profitability estimates to bid documents. Often, cost shifting is accompanied by an upward revision in contract profitability. You should test revised profitability estimates in the same manner in which job costs are compared to bid documents.

Perform analytics on job cost components. Contractors who perform similar types of work should have comparable costs from job to job. For example, a grading contractor with equipment-related costs equal to 40 percent of overall direct costs should have a similar relationship on other jobs.

Review allocations of indirect job costs. Cost shifting is often hidden in the allocation of indirect costs, such as internally owned equipment costs, shop costs, insurance, and labor burden. You should perform periodic tests to ensure that indirect costs are allocated properly to each job.

Perform a fade analysis. You should prepare two fade schedules. One schedule compares each job's prior period profitability estimate to the current estimate or actual results. The second schedule restates prior period uncompleted contract schedules using revised profitability figures. Each of these schedules will help you determine which contracts have had unusual fluctuations in profit.

Examine bid spreads. You should compare your client's bid to the second place bidder and to the average bid of all of the bidders. If a contractor is more than 5 percent to 10 percent below these other bidders, the contractor may realize little or no profit. Such a job is a prime candidate for cost shifting.

Compare profitability estimates to historical results. A contactor may attempt to hide cost shifting by increasing profit estimates on uncompleted jobs. When this occurs, the gross profit percentages on uncompleted jobs will often exceed the contractor's historical results. You should also consider comparing uncompleted contract gross profit percentages to completed contract percentages.

Affiliated Entities

In the construction industry, contractors frequently participate in joint ventures or have a direct or indirect affiliation with other entities. The prevalence of such arrangements in the industry can be attributed to factors such as legal liability, taxation, competition, ownership and operating arrangements, labor and labor union considerations, and regulatory requirements. As a result of these types of relationships among entities, construction firms are frequently involved in *related-party transactions*, as that term is defined in Financial Accounting Standards Board (FASB) Statement of Financial Accounting Standards No. 57, *Related Party Disclosures*. Review your contractor client's participations in joint ventures to evaluate whether investments in joint ventures are reported properly. You should also review joint venture agreements and document your client's participation.

The audit considerations for a contractor's participation in a partnership are similar to those for participation in a corporate joint venture. Partner participation may differ primarily in relation to the contractor's unlimited liability as a general partner for partnership obligations.

For any type of venture, remember to consider the nature of the venture, the scope of its operations, and the extent of involvement of each participant.

Variable Interest Entities

FASB Interpretation No. 46, *Consolidation of Variable Interest Entities*, issued in January 2003, affected the reporting of a large number of companies associated with special purpose entities (SPEs, entities established for a specific purpose). The concepts in FASB Interpretation No. 46 were very complex and far-reaching. In December 2003, the FASB issued Interpretation No. 46 (revised December 2003), *Consolidation of Variable Interest Entities* (FASB Interpretation No. 46(R)), which revised and clarified certain of the concepts in the original document.

FASB Interpretation No. 46(R) interprets Accounting Research Bulletin (ARB) No. 51, *Consolidated Financial Statements*, which, for approximately half a century, was the principal authoritative literature governing when an investor should consolidate an investee. ARB No. 51 concluded that consolidated financial statements are "usually necessary for fair presentation when one of the companies in the group directly or indirectly has a controlling interest in the other companies." FASB Statement No. 94, *Consolidation of All Majority-Owned Subsidiaries*, issued in October 1987, amended ARB No. 51 to remove one of the three exceptions provided in ARB No. 51 that allowed an investor to avoid consolidating a majority-owned investee. ARB No. 51, with certain exceptions, required consolidation of an investee if an investor had a controlling financial interest in the investee. In general, a controlling financial interest was exhibited by an ownership interest of more than 50 percent of the investee's voting stock.

In 1990, to address the consolidation of special-purpose entities for which voting rights were not considered substantive, the Emerging Issues Task Force (EITF) reached a consensus on Issue No. 90-15, "Impact of Nonsubstantive Lessors, Residual Value Guarantees, and Other Provisions in Leasing Transactions." Issue 90-15 required a lessee to consolidate an SPE-lessor if all the following conditions were met:

- Substantially all the SPE's activities involved assets to be leased to the lessee.
- The lessee was exposed to the substantive risks and was entitled to substantially all the residual rewards of the leased assets and the SPE's financing arrangements.
- The SPE's owners had not made a substantive residual equity investment that would be at risk throughout the term of the lease.

The consolidation of most SPEs was avoided based on the third condition not being met (in other words, the SPE's owners had made a substantive residual equity investment). As practice evolved, a "substantive residual equity investment" came to mean an amount equal to 3 percent of the fair value of the SPE's assets.

Then the Enron scandal exploded. Enron had set up an elaborate array of entities to shift debt away from the company's books, while absorbing substantially all the risk associated with that debt either through guarantees of the debt or the SPE's assets. The extent of those guarantees came as a surprise to many investors.

In response, the FASB issued Interpretation No. 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*, which requires a guarantor to recognize the fair value of its guarantee obligations as a liability and provide certain disclosures about the nature of guarantees it has provided, and FASB Interpretation No. 46 (which subsequently was replaced by FASB Interpretation No. 46(R)).

Importance in Construction

FASB Interpretation No. 46(R) may have a significant impact on construction companies. Some of the more common arrangements that may be affected by FASB Interpretation No. 46(R) include the following:

- Real estate developers frequently form separate legal entities to own property to be developed. The purpose of the separate legal entity is to isolate the developer's other assets from the project to be developed in the event the project is unsuccessful.
- The owners of closely held construction contractors may establish separate legal entities to acquire equipment that is then leased to the contractor. Often, such entities are created for estate-planning purposes.
- Contractors may also form joint ventures to develop a project. Joint venture partners could include another party with unique capabilities in some facet of the project. In some circumstances, such as when the bid documents require that a prime contractor perform more than half of the work, two or more contractors may form a joint venture to become the prime contractor, to meet the contractual requirements.

Each of these separate legal entities may meet the criteria in FASB Interpretation No. 46(R) to be a variable interest entity (VIE), which necessitates a careful consideration of the Interpretation's provisions.

It is common in the construction industry for a contractor to report its interests in a joint venture by consolidating its proportionate interest in the venture. The AICPA Accounting and Audit Guide *Construction Contractors* (the Guide), issued in 1981, provided guidance on how to account for joint ventures. In addition, EITF Issue No. 00-1, "Investor Balance Sheet and Income Statement Display under the Equity Method for Investments in Certain Partnerships and Other Ventures," recognized the specialized, long-standing practice that had developed in the construction industry by permitting companies to continue consolidating their proportionate interests in investees in the construction industry. However, after the issuance of FASB Interpretation No. 46(R), companies can no longer take it for granted that pro-rata consolidation is appropriate. If the entity is a VIE, the guidance in FASB Interpretation No. 46(R) will take precedence over longstanding industry practice.

Variable Interest Entities

FASB Interpretation No. 46(R) introduced a number of new concepts into the literature. FASB Interpretation No. 46(R) does not define a VIE, but it does describe the characteristics of one. As described by FASB Interpretation No. 46(R), a VIE is an entity for which a controlling financial interest is provided through ownership of interests other than voting stock. Rather, a controlling financial interest arises out of the economics—a holder of variable interests that is either exposed to a majority of the VIE's expected losses or is entitled to a majority of its expected residual rewards is the party with a controlling financial interest, even if none of the interests is in voting common stock.

FASB Interpretation No. 46(R) is complex. Judgment is called for in analyzing entities with which a company has business arrangements to determine if those entities are VIEs and, if so, whether consolidation is required.

In applying FASB Interpretation No. 46(R), an investor and its related parties (which include the investor's officers, employees, and directors; parties that have a "close business relationship" with the investor; and parties that cannot sell, pledge, or exchange their interests in an entity without the investor's prior approval) must first determine whether they have a variable interest.

Variable interests include, but are not limited to, equity investments; debt instruments; guarantees; beneficial interests; service contracts; leases, including guarantees or fixed-price purchase options; forward contracts; and options. In essence, almost any asset, liability, or off-balance-sheet contractual arrangement between parties could qualify as a variable interest. However, a variable interest is distinguished from other assets, liabilities, and off-balance-sheet contractual arrangements by virtue of the fact that a variable interest under FASB Interpretation No. 46(R) is one that absorbs the variability in the entity's return. For example, a party that guarantees the value of real estate held by a developer (or guarantees the developer's bank borrowings used to finance the real estate) has a variable interest because, through the guarantee, the guarantor will absorb any negative variability in returns on the real estate that result in the value of the real estate declining. As another example, a developer that acquires an option to purchase real estate for a fixed amount would have a variable interest because, through the purchase option, the developer will be entitled to any positive variability in returns on the real estate.

If it is decided that a party has a variable interest and it is not immediately clear that the interest is so minor it could not possibly result in that party being required to consolidate the entity in which the variable interest is held, that party must determine whether the entity is a VIE. Paragraph 5 of FASB Interpretation No. 46(R) indicates that an entity is a VIE if any one of the following criteria is met:

1. The total equity investment at risk is insufficient to permit the entity to finance its activities without additional subordinated financial support provided by any parties, including equity holders. For this purpose, the total equity investment at risk:

a. Includes only equity investments in the entity that participate significantly in profits and losses, even if those investments do not carry voting rights.
b. Does not include equity interests that the entity issued in exchange for subordinated interests in other variable interest entities.
c. Does not include amounts provided to the equity investor directly or indirectly by the entity or by other parties involved with the entity (for example, by fees, charitable contributions, or other payments), unless the provider is a parent, subsidiary, or affiliate of the investor that is required to be included in the same set of consolidated financial statements as the investor.
d. Does not include amounts financed for the equity investor (for example, by loans or guarantees of loans) directly by the entity or by other parties involved with the entity, unless that party is a parent, subsidiary, or affiliate of the investor that is required to be included in the same set of consolidated financial statements as the investor.

2. As a group the holders of the equity investment at risk lack any one of the following three characteristics of a controlling financial interest:
   a. The direct or indirect ability through voting rights or similar rights to make decisions about an entity's activities that have a significant effect on the success of the entity. The investors do not have that ability through voting rights or similar rights if no owners hold voting rights or similar rights (such as those of a common shareholder in a corporation or a general partner in a partnership).
   b. The obligation to absorb the expected losses of the entity. The investor or investors do not have that obligation if they are directly or indirectly protected from the expected losses or are guaranteed a return by the entity itself or by other parties involved with the entity.

c. The right to receive the expected residual returns of the entity. The investors do not have that right if their return is capped by the entity's governing documents or arrangements with other variable interest holders or the entity.

3. The equity investors as a group also are considered to lack characteristic 2(a) if (*a*) the voting rights of some investors are not proportional to their obligations to absorb the expected losses of the entity, their rights to receive the expected residual returns of the entity, or both and (*b*) substantially all the entity's activities (for example, providing financing or buying assets) either involve or are conducted on behalf of an investor that has disproportionately few voting rights. For purposes of applying this requirement, enterprises shall consider each party's obligations to absorb expected losses and rights to receive expected residual returns related to all that party's interests in the entity and not only to its equity investment at risk.

In some situations, it will be easy to determine if any of these conditions is met. In most circumstances, however, that will not be the case.

The requirements of FASB Interpretation No. 46 were originally to be applied immediately to all VIEs created after January 31, 2003, and no later than the beginning of the period beginning after June 15, 2003 (July 1, 2003, for a calendar year company that issues quarterly financial information that purports to comply with GAAP) to VIEs created before February 1, 2003. Because of concerns raised by constituents over the operationality of FASB Interpretation No. 46, the FASB delayed its effective date in October 2003 for those entities created before February 1, 2003. FASB Interpretation No. 46(R) modified the effective date provisions in FASB Interpretation No. 46 as follows.

For public entities that are small business issuers, FASB Interpretation No. 46(R) must be applied to all VIEs no later than the end of the first reporting period that ends after December 15, 2004 (the year ending December 31, 2004, for calendar year companies), including those VIEs to which FASB Interpretation No. 46 had already been applied (for example, those created after January, 31, 2003).

For public entities that are not small business issuers, FASB Interpretation No. 46(R) must be applied to all VIEs no later than the end of the first reporting period that ends after March 15, 2004 (the quarter ending March 31, 2004, for calendar year companies), including those VIEs to which FASB Interpretation No. 46 had already been applied.

A nonpublic entity is required to apply FASB Interpretation No. 46(R) to all VIEs in which it holds variable interests by the beginning of the first reporting period beginning after December 2004 (January 1, 2005, for a calendar year company). A nonpublic entity is required to apply FASB Interpretation No. 46(R) immediately to VIEs created after December 31, 2003.

In addition, FASB Interpretation No. 46(R) required public companies to apply either FASB Interpretation No. 46 or FASB Interpretation No. 46(R) to entities that would have previously been evaluated under the accounting literature as SPEs by the end of the first reporting period ending after December 15, 2003.

FASB Interpretation No. 46(R) expanded the consolidation requirements by requiring existing unconsolidated VIEs to be consolidated with their primary beneficiaries if the entities do not effectively disperse risk among the investing parties. As such, VIEs that effectively disperse risks will not be consolidated unless a single party holds an interest or combination of interests that effectively recombines risks that were previously dispersed.

Expected Losses

If an entity is a VIE, the primary beneficiary entity and its related parties need to determine if they—or another investor—are exposed to a majority of the entity's "expected losses." If so, the party exposed to a majority of expected losses is required to consolidate the VIE. That party is referred to in FASB Interpretation No. 46(R) as the VIE's "primary beneficiary."

If no investor is exposed to a majority of "expected losses," the enterprise and its related parties would need to determine if they are entitled to a majority of the entity's residual rewards. If so, the entity entitled to major rewards would be required to consolidate the entity.

If the enterprise is not required to consolidate the VIE, it would account for its investment in the entity using whatever method is appropriate under other accounting literature. (For equity investments, appropriate accounting methods may include using the equity or cost method, or recording at fair value if the investment has a readily determinable fair value and the enterprise and its related parties do not exercise significant influence over the entity's activities. If the variable interest is based on guarantees or other contractual arrangements, disclosure is required.)

Where significant investments do not result in consolidation, disclosure should include the nature of the investment, the exposure to losses, the purpose and size of the investment and activities with the VIE.

In determining whether an entity's equity is sufficient to cover "expected losses," it is important to understand that "expected losses" do not only arise in situations where an investor loses its stated invested principal.

As used in FASB Interpretation No. 46(R), "expected losses" can arise when an investment underperforms expectations. For example, if the property held by a real estate limited partnership is expected to appreciate by 10 percent per year for the five-year life of the partnership, the partnership would incur "expected losses" for any possible scenario where appreciation could be less than 10 percent per year.

So, if it were possible that the property could appreciate by 6 percent annually, the entity would need to have sufficient equity to "absorb" the opportunity cost related to the 4 percent difference between the expected return and the possible return.

Control of Entities' Activities

Fees paid to any of the investors, for any reason, must be deducted from the equity invested when considering whether the equity is sufficient to absorb losses and whether the equity investors, as a group, control the activities of an entity.

For example, if a developer is the general partner in a limited partnership and receives a fee at inception in excess of its investment, the limited partnership entity would be deemed to be a VIE. This is because FASB Interpretation No. 46(R) requires investors with equity in the entity be able to control its activities to not be considered a VIE.

In this example, the general partner—who is the only party with the right to control the ongoing activities of the partnership, the other partners being passive investors—does not have equity in the entity since the fees it received at inception exceeded its investment. That conclusion could require a limited partner to consolidate if the limited partner owns more than 50 percent of the limited partnership interests even though that limited partner's risks are limited to its accumulated and undistributed investment.

This same concept would apply to distributions of early cash flows made to construction joint venture partners. If one partner's net investment is reduced to zero, the other venturer may be required to consolidate the joint venture (full consolidation, not proportionate).

Conclusion

As a result of FASB Interpretation No. 46, you should review your client's participations in VIEs to evaluate whether these entities should be consolidated. In many cases, real estate partnerships, LLCs, and other entities guaranteed by the operating entity (for example, the contractor) or its owner will have to be consolidated. To ensure compliance, review the full provisions of FASB Interpretation No. 46 when accounting for your clients' partnerships and alliances.

FASB staff positions. The FASB has issued and proposed several FASB Staff Positions (FSPs) related to Interpretation No. 46 that may be of interest to construction contractors and their auditors. FSPs are available on the FASB Web site at www.fasb.org.

Mandatorily Redeemable Stock

In May 2003, the FASB issued Statement No. 150, *Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity*. Most contractors are closely held, and many of them have buy-sell agreements requiring the company to redeem the shares of the owners in the event of death or disability or other leave of employment. Many sureties require that contractors have such an agreement. For the many privately held construction companies that utilize even simple buy-sell agreements for share redemption (whether or not these agreements are funded by life insurance policies or by equity "buy back" that can be paid over time), this new Statement will have far-reaching consequences.

FASB Statement No. 150 requires companies with mandatory redemption provisions in their agreements to treat the amounts necessary to meet the redemption clauses as debt rather than equity. In many cases, the redemption amount may exceed the equity. In any case, equity can be seriously depleted. The depletion of the equity will put further pressures on sureties and creditors to continue providing surety and banking credit.

The end result of FASB Statement No. 150 in reducing contractors' equity will be to place loan agreements and surety bonds in default of these requirements, without any change in economic substance. If privately held contractors are considered in default of their loan(s) and/or surety bond(s) based on FASB Statement No. 150, many of these companies may go out of business.

Many privately held contractors hold real estate and equipment showing fair market values greater than their historic cost basis. Consequently, the recognition and measurement of the liability of the potential buy back of equity under FASB Statement No. 150 will, in many cases, produce a liability equal to or greater than 100 percent of the contractor's prior equity position.

You may wish to consult with your clients before the application date of FASB Statement No. 150 and review their buy-sell and other agreements.

In November 2003, the FASB issued FSP FAS 150-3, which defers the effective date of the mandatorily redeemable provisions of FASB Statement No. 150 and all related FSPs (including FSP FAS 150-2) for nonpublic entities as follows: (1) until fiscal periods beginning after December 15, 2004, for instruments that are mandatorily redeemable on fixed dates and (2) indefinitely, pending further FASB action, if the redemption date is not fixed or if the payout amount is variable and not based on an index. FSP FAS 150-3 also defers the effective date for certain mandatorily redeemable noncontrolling interests (of all entities, public and nonpublic). It should be pointed out that the deferral for mandatorily redeemable financial instruments of certain nonpublic entities does not apply to a company that is considered to be a Securities and Exchange Commission (SEC) registrant, even though it meets the definition of a nonpublic entity in FASB Statement No. 150. Companies should carefully review the definition in this FSP to determine whether they or a subsidiary are considered an SEC registrant, and therefore are not eligible for this deferral. FSP FAS 150-3 also sets forth disclosure and transition guidance for entities that are subject to this deferral. Please refer to FSP FAS 150-3 for more information.

The FASB has also issued several other FSPs related to FASB Statement No. 150 that may be of interest to construction contractors and their auditors. FSPs are available on the FASB Web site at www.fasb.org.

New Auditing and Attestation Pronouncements and Other Guidance

Presented below is a list of auditing, attestation, and quality control pronouncements and other guidance issued since the publication of last year's Alert. For information on auditing and attestation standards, quality control standards, and other guidance that may have been issued subsequent to the writing of this Alert, please refer to the AICPA Web site at www.aicpa.org/members/div/auditstd/technic.htm and the PCAOB Web site at www.pcaobus.org (public company audits only). You may also look for announcements of newly issued standards in the *CPA Letter*, *Journal of Accountancy*, and the quarterly electronic newsletter, "In Our Opinion," issued by the AICPA's Auditing Standards team and available at www.aicpa.org/members/div/auditstd/opinion/index.htm.

SOP 04-1 (November 2004)	*Auditing the Statement of Social Insurance* This SOP assists CPAs in auditing the statement of social insurance—a financial statement required by Federal Accounting Standards Advisory Board (FASAB) Statement of Federal Financial Accounting Standards (SFFAS) No. 17, *Accounting for Social Insurance*, and SFFAS No. 25, *Reclassification of Stewardship Responsibilities and Eliminating the Current Services Assessment.*
ASB Audit Interpretation No. 17 of SAS No. 58 (June 2004)	"Clarification in the Audit Report of the Extent of Testing of Internal Control Over Financial Reporting in Accordance With Generally Accepted Auditing Standards" This Interpretation provides illustrative language in the auditor's report to clarify that an audit performed in accordance with GAAS does not require the same level of testing and reporting on internal control over financial reporting as an audit of an issuer for whom Section 404(b) of the Sarbanes-Oxley Act of 2002 is applicable.
ASB Audit Interpretation No. 18 of SAS No. 58 (June 2004)	"Reference to PCAOB Standards in an Audit Report of a Nonissuer" This Interpretation clarifies the applicability of GAAS and provides illustrative language for a dual reference reporting situation when the audit was conducted in accordance with both GAAS and the auditing standards of the PCAOB.
PCAOB Auditing Standard No. 1 (May 2004) (Applicable to public company audits only)	*References in Auditor's Reports to the Standards of the Public Company Accounting Oversight Board* This standard requires that auditors' reports on engagements conducted in accordance with PCAOB standards include a reference that the engagement was conducted in accordance with those standards. The rule replaces previously required references to GAAS. It also adopted technical amendments to its rules on interim standards that referred to existing professional standards of auditing, attestation, quality control, ethics and independence. This standard is effective beginning May 24, 2004.

PCAOB Auditing Standard No. 2 (June 2004) (Applicable to public company audits only)	*An Audit of Internal Control Over Financial Reporting Performed in Conjunction With an Audit of Financial Statements* This standard address both the work that is required to audit internal control over financial reporting and the relationship of that audit to the audit of the financial statements. This standard is effective for audits of companies with fiscal years ending on or after November 15, 2004, for accelerated filers, or July 15, 2005, for other companies.
PCAOB Auditing Standard No. 3 (August 2004) (Applicable to public company audits only)	*Audit Documentation and Amendment to Interim Auditing Standards* This standard establishes general requirements for documentation an auditor should prepare and retain in connection with engagements conducted pursuant to the standards of the PCAOB. This standard is effective for audits of financial statements of companies with fiscal years ending on or after November 15, 2004.
PCAOB Rules (Various dates) (Applicable to public company audits only)	In addition to the standards discussed above, the PCAOB has also received SEC approval for numerous rules. The newly issued rules pertain to a number of topics such as various amendments to the interim standards, terminology, oversight of non-U.S. registered public accounting firms, registration deadline for non-U.S. firms, inspections of public accounting firms, investigations and adjudications, registration withdrawals, and other matters.
PCAOB Implementation Guidance (June 2004) (Applicable to public company audits only)	The PCAOB issued staff guidance on Auditing Standards No. 1 and No. 2 in the form of two separate questions and answers (Q&As) documents.
Revised AICPA Ethics Interpretation No. 101-3 (September 2003 and July 2004)	"Performance of Nonattest Services" This revised Interpretation modifies the practitioner's responsibilities for maintaining independence when providing nonattest services (e.g., tax or consulting services) to attest clients. Refer to the *Independence and Ethics Alert 2004/05* for further information.
AICPA Toolkit (December 2003) (nonauthoritative)	*The AICPA Audit Committee Toolkit* This toolkit provides comprehensive advice on audit committee duties such as setting agendas, conducting executive sessions, and evaluating the effectiveness of auditors and the audit committee, itself. It also offers basic information on important topics such as internal controls, antifraud accountability, and off-balance-sheet transactions.

(*continued*)

AICPA Practice Alert 2003-3 (January 2004) (nonauthoritative)	*Acceptance and Continuance of Clients and Engagements* This Practice Alert provides practitioners and their firms with guidance regarding the establishment of policies and procedures for deciding whether to accept or continue a client relationship and whether to perform a specific engagement for that client.
AICPA Practice Aid (May 2004) (nonauthoritative)	*Valuation of Privately-Held Company Equity Securities Issued as Compensation* This Practice Aid provides useful information on measuring the cost of such transactions and properly reflecting them in company financial statements.
AICPA Practice Aid (June 2004) (nonauthoritative)	*Auditing Governmental Financial Statements: Programs and Other Practice Aids* This Practice Aid provides audit programs and other tools to help practitioners conduct their governmental audits in light of the extensive provisions of Governmental Accounting Standards Board Statement No. 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments*, and the new financial reporting model it introduces.
AICPA Technical Practice Aid 9110.15 (September 2004) (nonauthoritative)	"Reporting on Medicaid/Medicare Cost Reports" This Technical Practice Aid discusses form of report an auditor should issue to comply with the "certification" requirement from payors in regard to health care organization financial statement audit engagements.
AICPA Practice Aid (November 2004) (nonauthoritative)	*Establishing and Maintaining a System of Quality Control for a CPA Firm's Accounting and Auditing Practice* This Practice Aid can help practitioners better understand and apply the Statements on Quality Control Standards issued by the AICPA. It contains new policies and procedures that a firm should consider including in its system of quality control to be responsive to the changing environment.

The summaries provided above are for informational purposes only and should not be relied upon as a substitute for a complete reading of the applicable standards and other guidance. You should visit the applicable Web site for complete information.

The standards and interpretations promulgated by the AICPA Auditing Standards Board (ASB) are now available free of charge by visiting the AICPA's Audit and Attest Standards Team's page at www.aicpa.org/members/div/auditstd/Auth_Lit_for_NonIssuers.htm. Members and nonmembers alike can download the auditing, attestation, and quality control standards by either choosing a section of the codification or an individual statement number. You can also obtain copies of AICPA standards and other guidance by contacting the Service Operations Center at (888) 777-7077 or online at www.cpa2biz.com.

New Accounting Pronouncements and Other Guidance

Presented below is a list of recently issued accounting pronouncements and other guidance issued since the publication of last year's Alert. For information on accounting standards issued subsequent to the publication of this Alert, please refer to the AICPA Web site at www.aicpa.org and the FASB Web site at www.fasb.org. You may also look for announcements of newly issued standards in the *CPA Letter* and the *Journal of Accountancy.*

FASB Statement No. 132 (revised 2003) (December 2003)	*Employers' Disclosures about Pensions and Other Postretirement Benefits—an Amendment of FASB Statements No. 87, 88, and 106* This Statement revises employers' disclosures about pension plans and other postretirement benefit plans by requiring additional disclosures to those in the original Statement No. 132 about the assets, obligations, cash flows, and net periodic benefit cost of defined benefit pension plans and other defined benefit postretirement plans.
FASB Interpretation No. 46(R) (December 2003)	*Consolidation of Variable Interest Entities (revised December 2003)—an Interpretation of Accounting Research Bulletin No. 51* This Interpretation was issued to clarify some of the provisions of FASB Interpretation No. 46, *Consolidation of Variable Interest Entities,* and to exempt certain entities from its requirements.
FASB EITF Issues	Go to www.fasb.org for a complete list of EITF issues.
FASB Staff Positions	Go to www.fasb.org for a complete list of FSPs related to FASB Statements, FASB Interpretations and EITFs.
SOP 03-4 (December 2003)	*Reporting Financial Highlights and Schedules of Investments by Nonregistered Investment Partnerships: An Amendment to the Audit and Accounting Guide* Audits of Investment Companies *and AICPA Statement of Position 95-2,* Financial Reporting by Nonpublic Investment Partnerships This SOP provides guidance on the application of certain provisions of the AICPA Audit and Accounting Guide, *Audits of Investment Companies,* and AICPA Statement of

(continued)

	Position 95-2 that are directed to the reporting by nonregistered investment partnerships of financial highlights and the schedule of investments. It amends certain provisions of the *Audits of Investment Companies Guide* and SOP 95-2 by adapting those provisions to nonregistered investment partnerships based on their differences in organizational and operational structures from registered investment partnerships.
SOP 03-5 (December 2003)	*Financial Highlights of Separate Accounts: An Amendment to the Audit and Accounting Guide,* Audits of Investment Companies This SOP provides guidance on reporting financial highlights by separate accounts of insurance enterprises.
AICPA Technical Practice Aid 6400.45 (August 2004)	"Applicability of FASB Interpretation No. 45—Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others—Physician Loans" This Technical Practice Aid addresses whether physician loans are subject to FASB Interpretation No. 45.
AICPA Technical Practice Aid 6400.46 (August 2004)	"Applicability of FASB Interpretation No. 45—Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others—Mortgage Guarantees" This Technical Practice Aid addresses whether mortgage guarantees are subject to FASB Interpretation No. 45.
AICPA Audit and Accounting Guide (January 2004)	*Depository and Lending Institutions: Banks and Savings Institutions, Credit Unions, Finance Companies and Mortgage Companies*

The summaries provided above are for informational purposes only and should not be relied upon as a substitute for a complete reading of the applicable standards and other guidance. You should visit the applicable Web site for complete information. You can obtain copies of AICPA standards and other guidance by contacting the Service Operations Center at (888) 777-7077 or online at www.cpa2biz.com.

SEC Staff Accounting Bulletins

Auditors of public companies and of those companies that file with the SEC need to consider the accounting and financial reporting requirements contained in the SEC regulations as well as requirements imposed upon auditors. The summaries below are for informational purposes only and should not be relied upon as a substitute for a complete reading of the applicable rule. See the SEC Web site at www.sec.gov for complete information.

Staff Accounting Bulletin (SAB) No. 104 (December 2003)	*Revenue Recognition* This SAB updates portions of the interpretative guidance included in Topic 13 of the SEC's codification of SABs to make it consistent with current authoritative accounting guidance. The SAB's principal revisions relate to the rescission of material no longer necessary because of private-sector developments in U.S. GAAP.
SAB No. 105 (March 2004)	*Application of Accounting Principles to Loan Commitments* This SAB adds section DD, "Loan Commitments Accounted for as Derivative Instruments," to Topic 5, "Miscellaneous Accounting," of the Commission's codification of SABs. The new section provides interpretative guidance SEC-registered companies should consider when recognizing such commitments, and it emphasizes certain disclosure requirements that may be relevant to mortgage banking activities.
SAB No. 106 (September 2004)	Section 4, "Interaction of Statement 143 and the Full Cost Rules," under Topic 12-D, *Oil and Gas Producing Activities—Application of Full Cost Method of Accounting* The interpretations in this SAB express the staff's views regarding the application of FASB Statement No. 143, *Accounting for Asset Retirement Obligations*, by oil and gas producing companies following the full cost accounting method. The SAB, which adds Section 4 to Topic 12-D of the SAB series, deals with the impact of FASB Statement No. 143 on the full cost ceiling test and on the calculation of depreciation, depletion, and amortization.

On the Horizon

Auditors should keep abreast of auditing and accounting developments and upcoming guidance that may affect their engagements. You should check the appropriate standard-setting Web sites (listed below) for a complete picture of all accounting and auditing projects in progress. Presented below is brief information about certain projects that are expected to result in final standards in the near future. Remember that exposure drafts are nonauthoritative and cannot be used as a basis for changing GAAP or GAAS.

The following table lists the various standard-setting bodies' Web sites, where information may be obtained on outstanding exposure drafts, including downloading a copy of the exposure draft.

These Web sites contain much more in-depth information about proposed standards and other projects in the pipeline.

Standard-Setting Body	*Web Site*
AICPA Auditing Standards Board (ASB) (Note that for audits of public companies, the Public Company Accounting Oversight Board sets auditing standards.)	www.aicpa.org/members/div/auditstd/drafts.htm
AICPA Accounting Standards Executive Committee (AcSEC)	http:/www.aicpa.org/members/div/acctstd/edo/index.htm
Financial Accounting Standards Board (FASB)	www.fasb.org
Governmental Accounting Standards Board (GASB)	www.gasb.org
Professional Ethics Executive Committee (PEEC)	www.aicpa.org/members/div/ethics/index.htm
Public Company Accounting Oversight Board (PCAOB)	www.pcaobus.org

Help Desk—The AICPA's standard-setting committees publish exposure drafts of proposed professional standards exclusively on the AICPA Web site. The AICPA will notify interested parties by e-mail about new exposure drafts. To be added to the notification list for all AICPA exposure drafts, send your e-mail address to memsat@aicpa.org. Indicate "exposure draft e-mail list" in the subject header field to help process your submission more efficiently. Include your full name, mailing address and, if known, your membership and subscriber number in the message.

Project on Revenue Recognition

Revenue usually is the largest single item in financial statements, and issues involving revenue recognition are among the most important and difficult that standard setters and accountants face. Because no comprehensive standard on revenue recognition exists, there is a significant gap between the broad conceptual guidance in the FASB's Concepts Statements and the detailed guidance in the authoritative literature. Most of the authoritative literature provides industry or transaction-specific implementation guidance, and it has been developed largely on an ad hoc basis and issued in numerous pronouncements with differing degrees of authority. Those pronouncements include APB Opinions, FASB Statements, AICPA Audit and Accounting Guides, AICPA SOPs, FASB Interpretations, EITF Issues, SEC SABs, and the like. Each focuses on a specific practice problem and has a narrow scope, and the guidance is not always consistent across pronouncements.

The SEC sought to fill the gap in the accounting literature with SAB No. 101, *Revenue Recognition in Financial Statements*, which was issued in December 1999, and the companion document, *Revenue Recognition in Financial Statements—Frequently Asked Questions and Answers*, which was issued in October 2000. SAB No. 101 was superceded by SAB No. 104, *Revenue Recognition*, in December 2003. SAB No. 104 states that if a transaction falls within the scope of specific authoritative literature on revenue recognition, that guidance should be followed; in the absence of such guidance, the revenue recognition criteria in Concepts Statement 5 (namely, that revenue should not be recognized until it is (1) *realized or realizable* and (2) *earned*) should be followed. However, SAB No. 104 is more specific, stating additional requirements for meeting those criteria, and reflects the SEC staff's view that the four basic criteria for revenue recognition in AICPA SOP 97-2, *Software Revenue Recognition*, should be a foundation for all basic revenue recognition principles. Those criteria are:

- Persuasive evidence of an arrangement exists.
- Delivery has occurred.
- The vendor's fee is fixed or determinable.
- Collectibility is probable.

Some criticized SAB No. 101 on the basis that the criteria in SOP 97-2 were developed for a particular industry and that broader application of those criteria was neither contemplated nor intended. They asserted that that guidance may not be appropriate for certain recognition issues, including some that the EITF has considered. Others noted that a SAB is designed to provide the SEC staff's interpretive responses and not to change GAAP. For that reason, SABs are issued without an invitation for comment. Critics argued that SAB No. 101 had in fact changed GAAP by promulgating changes in industry practice without the full due process and deliberation that characterize the FASB's decision-making process. Even though the SEC guidance for revenue recognition applies only to SEC registrants, the work done in developing and implementing SAB No. 101 has focused attention on revenue recognition issues and will be very useful in this project.

In response to these issues, the FASB has undertaken a project to develop a comprehensive statement on revenue recognition that is conceptually based and framed in terms of principles. The FASB is partnering with the International Accounting Standards Board (IASB) on this project.

The planned comprehensive revenue recognition Statement will (1) eliminate the inconsistencies in the existing authoritative literature and accepted practices, (2) fill the voids that have emerged in revenue recognition guidance in recent years, and (3) provide a conceptual basis for addressing issues that arise in the future.

Auditing Pipeline—Nonpublic Companies

The proposed standards discussed in this section would not apply to the audits of public companies. Readers should keep abreast of the status of the following projects and projected exposure drafts, inasmuch as they will substantially affect the audit process. More information can be obtained on the AICPA's Web site at www.aicpa.org.

Seven SASs Related to Audit Risk Proposed

In December 2002, the AICPA's ASB issued an exposure draft proposing seven new SASs relating to the auditor's risk assessment process. The ASB believes that the requirements and guidance provided in the proposed SASs, if adopted, would result in a substantial change in audit practice and in more effective audits. The primary objective of the proposed SASs is to enhance auditors' application of the audit risk model in practice by requiring:

- More in-depth understanding of the entity and its environment, including its internal control, to identify the risks of material misstatement in the financial statements and what the entity is doing to mitigate them.
- More rigorous assessment of the risks of material misstatement of the financial statements based on that understanding.
- Improved linkage between the assessed risks and the nature, timing, and extent of audit procedures performed in response to those risks.

The exposure draft consists of the following proposed SASs:

- *Amendment to Statement on Auditing Standards No. 95,* Generally Accepted Auditing Standards
- *Audit Evidence*
- *Audit Risk and Materiality in Conducting an Audit*
- *Planning and Supervision*
- *Understanding the Entity and Its Environment and Assessing the Risks of Material Misstatement*
- *Performing Audit Procedures in Response to Assessed Risks and Evaluating the Audit Evidence Obtained*
- *Amendment to Statement on Auditing Standards No. 39,* Audit Sampling

The proposed SASs establish standards and provide guidance concerning the auditor's assessment of the risks of material misstatement in a financial statement audit, and the design and performance of audit procedures whose nature, timing, and extent are responsive to the assessed risks. In addition, the proposed SASs establish standards and provide guidance on planning and supervision, the nature of audit evidence, and evaluating whether the audit evidence obtained affords a reasonable basis for an opinion regarding the financial statements under audit. Readers should be alert for the issuance of final standards in the first half of 2005.

Proposed SAS, *Communication of Internal Control Related Matters Noted in an Audit*

This proposed SAS will supercede SAS No. 60, *Communication of Internal Control Related Matters Noted in an Audit* (AICPA, *Professional Standards,* vol. 1, AU sec. 325), and significantly strengthen the quality of auditor communications of such matters in audits of nonpublic companies. Readers should be alert for the issuance of a final standard.

Proposed Statement on Standards for Auditing Engagements, *Reporting on an Entity's Internal Control Over Financial Reporting*

This Statement establishes standards and provides guidance to the practitioner who is engaged to issue or does issue an examination report on the effectiveness of an entity's internal control over financial reporting as of a point in time (or on an assertion thereon). Specifically, guidance is provided regarding the following:

- Conditions that must be met for a practitioner to accept an engagement to examine the effectiveness of an entity's internal control and the prohibition of acceptance of an engagement to review such subject matter
- Engagements to examine the design and operating effectiveness of an entity's internal control
- Engagements to examine the design and operating effectiveness of a portion of an entity's internal control (for example, internal control over financial reporting of an entity's operating division or its accounts receivable)
- Engagements to examine only the suitability of design of an entity's internal control (no assertion is made about the operating effectiveness of internal control)
- Engagements to examine the design and operating effectiveness of an entity's internal control based on criteria established by a regulatory agency

Readers should be alert for the issuance of a final standard.

Auditing Pipeline—Public Companies Only

Proposed PCAOB Auditing Standard, *Conforming Amendments to PCAOB Interim Standards Resulting From the Adoption of PCAOB Auditing Standard No. 2*

This standard proposes conforming amendments to the PCAOB interim auditing standards as a result of the issuance of PCAOB Auditing Standards No. 2, *An Audit of Internal Control Over Financial Reporting Performed in Conjunction with an Audit of Financial Statements*. In particular, conforming amendments are proposed for the interim auditing, attestation, and independence standards. This proposed standard was adopted by the PCAOB in September 2004 (Release No. 2004-008). Readers should be alert for the SEC's approval of this standard. See the PCAOB's Web site at www.pcaobus.org for complete information.

AICPA Resource Central

The following publications deliver valuable guidance and practical assistance as potent tools to be used on your construction engagements (product numbers appear in parentheses).

- Audit and Accounting Guide *Auditing Derivative Instruments, Hedging Activities and Investments in Securities (012520kk)*
- Audit and Accounting Guide *Auditing Revenue in Certain Industries (012514kk)*
- Audit and Accounting Guide *Audit Sampling (012530kk)*
- Audit and Accounting Guide *Analytical Procedures (012554kk)*
- Practice Aid *Auditing Estimates and Other Soft Accounting Information (010010kk)*
- *Accounting Trends & Techniques—2004 (009896kk)*
- Practice Aid *Preparing and Reporting on Cash- and Tax-Basis Financial Statements (006701kk)*

Audit and Accounting Manual

The *Audit and Accounting Manual* (product no. 005134kk) is a valuable nonauthoritative practice tool designed to provide assistance for audit, review, and compilation engagements. The Manual contains numerous practice aids, samples, and illustrations, including audit programs, auditors' reports, checklists, engagement letters, management representation letters, and confirmation letters.

AICPA reSOURCE: Online Accounting and Auditing Literature

Get access—anytime, anywhere—to the AICPA's latest *Professional Standards, Technical Practice Aids*, Audit and Accounting Guides (more than 20!), Audit Risk Alerts (more than 15!), and *Accounting Trends & Techniques*. To subscribe to this essential online service for accounting professionals, go to cpa2biz.com.

Educational Courses

The AICPA has developed a number of continuing professional education (CPE) courses that are valuable to CPAs working in the construction industry. Those courses include (product numbers are in parentheses):

- *AICPA's Annual Accounting and Auditing Workshop* (2004 edition) (736180kk, text; for product numbers for other formats please refer to the cpa2biz Web site). Whether you are in industry or public practice, this course keeps you current and informed and shows you how to apply the most recent standards.

- *The AICPA's Guide to Business Consolidations, Goodwill and Other Consolidation Issues* (735128kk). Learn how FASB Statements No. 141 and No. 142 have changed the rules for business combinations and goodwill accounting.

- *Auditing in a Paperless Society* (730124kk). Now that paper is slowly diminishing, where do you go? This course will teach you how to develop strategies for auditing around, through, and with a computer.

- *Real Estate Accounting and Auditing* (730603kk). This course provides an in-depth study of the unique requirements that apply at each stage of the real estate life cycle.

Online CPE

AICPA InfoBytes, offered exclusively through CPA2Biz, is the AICPA's flagship online learning product. Selected as one of *Accounting Today*'s top 100 products for 2003, AICPA InfoBytes now offers a free trial subscription to the entire product for up to 30 days. AICPA members pay $149 ($369 nonmembers) for a new subscription and $119 ($319 nonmembers) for the annual renewal. Divided into one- and two-credit courses that are available 24/7, AICPA InfoBytes offers hundreds of hours of learning in a wide variety of topics. To register or learn more, visit www.cpa2biz.com/infobytes.

Service Operations Center

To order AICPA products, receive information about AICPA activities, and find help on your membership questions, call the AICPA Service Operations Center at (888) 777-7077.

Technical Hotline and Ethics Hotline

Do you have a complex technical question about generally accepted accounting principles (GAAP); other comprehensive bases of accounting (OCBOA); accounting, auditing, or compilation engagements; review engagements; or other technical matters? If so, use the AICPA's Accounting and Auditing Technical Hotline. AICPA staff will research your question and call you back with their answer. You can reach the Technical Hotline at (888) 777-7077.

In addition to the Technical Hotline, the AICPA also offers an Ethics Hotline. Members of the AICPA's Professional Ethics Team answer inquiries concerning independence and other behavioral issues related to the application of the AICPA Code of Professional Conduct. You can reach the Ethics Hotline at (888) 777-7077.

Conferences

Among the many interesting conferences the AICPA offers, there is one that might interest you and your construction industry clients. Held late each fall, the AICPA National Construction Industry Conference presents a comprehensive program revealing latest trends and developments in the construction industry. The conference offers a national perspective and addresses the newest trends in conducting business, among other topics.

For additional information, contact CPA2Biz at its Web site, cpa2biz.com.

Web Sites[6]

AICPA Online and CPA2Biz

Here is a unique opportunity to stay abreast of matters relevant to the CPA profession! AICPA Online, at aicpa.org, informs you of developments in the accounting and auditing world as well as developments in congressional and political affairs affecting CPAs. In addition, cpa2biz.com offers you all the latest AICPA products, including more than 15 Audit Risk Alerts, more than 20 Audit and Accounting Guides, the professional standards, and CPE courses.

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This Audit Risk Alert replaces *Construction Contractors Industry Developments—2003/04. Construction Contractors Industry Developments* is published annually. As you encounter audit or industry issues that you believe warrant discussion in next year's Alert, please feel free to share them with us. Any other comments that you have about the Alert would also be appreciated. You may e-mail these comments to ymishkevich@aicpa.org or write to:

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6. Additional helpful Web sites are presented in the Appendix.

APPENDIX
Helpful Web Sites

Here are some useful Web sites that may provide valuable information as you plan your client engagements. In addition to these Web sites, be sure to review those listed in the "On the Horizon" section of this Alert.

General Web Sites of Interest

Name of Site	*Content*	*Internet Address*
American Institute of CPAs	Summaries of recent auditing and other professional standards as well as other AICPA activities	www.aicpa.org
Financial Accounting Standards Board	Summaries of recent accounting pronouncements and other FASB activities	www.fasb.org
The Electronic Accountant	World Wide Web magazine that features up-to-the-minute news for accountants	www.electronicaccountant.com
AuditNet	Electronic communications among audit professionals	www.cowan.edu.au/mra/home.htm
CPAnet	Links to other Web sites of interest to CPAs	www.cpalinks.com/
Accountant's Home Page	Resources for accountants and financial and business professionals	www.computercpa.com/
Double Entries	A weekly newsletter on accounting and auditing around the world	www.csu.edu.au/lists.anet/ADBLE-L/index.html
U.S. Tax Code Online	A complete text of the U.S. Tax Code	www.fourmilab.ch/ustax/ustax.html
Federal Reserve Bank of New York	Key interest rates	www.ny.frb.org/pihome/statistics/dlyrates

(*continued*)

Name of Site	*Content*	*Internet Address*
Cybersolve	Online financial calculators, such as ratio and breakeven analysis	www.cybersolve.com/tools1.html
FedWorld. Gov	U.S. Department of Commerce-sponsored site providing access to government publications	www.fedworld.com
Hoovers Online	Online information on various companies and industries	www.hoovers.com
Ask Jeeves	Search engine that uses a user-friendly question format and provides simultaneous search results from other search engines (e.g., Excite, Yahoo, AltaVista)	www.askjeeves.com
Vision Project	Information on the profession's Vision project	www.cpavision.org/horizon
Internet Bulletin for CPAs	CPA tool for Internet sites, discussion groups, and other resources for CPAs	www.kentis.com/ib.html
Governmental Accounting Standards Board	Summaries of recent accounting pronouncements and other GASB activities	www.gasb.org
Society of Industrial and Office Realtors	Industrial and office real estate information	www.sior.com
Engineering News Record	Source of important information for owners, contractors, and design and engineering professionals	www.enr.com
Construction.com	A McGraw-Hill company that unifies the resources of Dodge, Sweets, *Architectural Record*, ENR, and Regional Publications and includes market analysis and forecasting, industry trends, and insights	www.construction.com